

Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe Val Gln Thr His Arg
 35 40 45
 Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu Asp Glu Met Phe Tyr
 50 55 60
 Val Asp Leu Asp Lys Lys Glu Thr Val Trp His Leu Glu Glu Phe Gly
 65 70 75 80
 Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu Ala Asn Ile Ala Ile
 85 90 95
 Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg Ser Asn His Thr Gln
 100 105 110
 Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe Pro Lys Glu Pro Val
 115 120 125
 Glu Leu Gly Gln Pro Asn Thr Leu Ile Cys His Ile Asp Lys Phe Phe
 130 135 140
 Pro Pro Val Leu Asn Val Thr Trp Leu Cys Asn Gly Glu Leu Val Thr
 145 150 155 160
 Glu Gly Val Ala Glu Ser Leu Phe Leu Pro Arg Thr Asp Tyr Ser Phe
 165 170 175
 His Lys Phe His Tyr Leu Thr Phe Val Pro Ser Ala Glu Asp Phe Tyr
 180 185 190
 Asp Cys Arg Val Glu His Trp Gly Leu Asp Gln Pro Leu Leu Lys His
 195 200 205
 Trp Glu Ala Gln Glu Pro Ile Gln Met Pro Glu Thr Thr Glu Thr Val
 210 215 220
 Leu Cys Ala Leu Gly Leu Val Leu Gly Leu Val Gly Ile Ile Val Gly
 225 230 235 240
 Thr Val Leu Ile Ile Lys Ser Leu Arg Ser Gly His Asp Pro Arg Ala
 245 250 255
 Gln Gly Thr Leu
 260
 <210> 2439

<211> 255
 <212> PRT
 <213> Homo sapiens

<400> 2439

Met Ile Leu Asn Lys Ala Leu Leu Leu Gly Ala Leu Ala Leu Thr Thr
 1 5 10 15

Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala
 20 25 30

Ser Cys Gly Val Asn Leu Tyr Gln Phe Tyr Gly Pro Ser Gly Gln Tyr
 35 40 45

Thr His Glu Phe Asp Gly Asp Glu Gln Phe Tyr Val Asp Leu Glu Arg
 50 55 60

Lys Glu Thr Ala Trp Arg Trp Pro Glu Phe Ser Lys Phe Gly Gly Phe
 65 70 75 80

Asp Pro Gln Gly Ala Leu Arg Asn Met Ala Val Ala Lys His Asn Leu
 85 90 95

Asn Ile Met Ile Lys Arg Tyr Asn Ser Thr Ala Ala Thr Asn Glu Val
 100 105 110

Pro Glu Val Thr Val Phe Ser Lys Ser Pro Val Thr Leu Gly Gln Pro
 115 120 125

Asn Thr Leu Ile Cys Leu Val Asp Asn Ile Phe Pro Pro Val Val Asn
 130 135 140

Ile Thr Trp Leu Ser Asn Gly Gln Ser Val Thr Glu Gly Val Ser Glu
 145 150 155 160

Thr Ser Phe Leu Ser Lys Ser Asp His Ser Phe Phe Lys Ile Ser Tyr
 165 170 175

Leu Thr Phe Leu Pro Ser Ala Asp Glu Ile Tyr Asp Cys Lys Val Glu
 180 185 190

His Trp Gly Leu Asp Gln Pro Leu Leu Lys His Trp Glu Pro Glu Ile
 195 200 205

Pro Ala Pro Met Ser Glu Leu Thr Glu Thr Val Val Cys Ala Leu Gly
 210 215 220

Leu Ser Val Gly Leu Met Gly Ile Val Val Gly Thr Val Phe Ile Ile
 225 230 235 240

Gln Gly Leu Arg Ser Val Gly Ala Ser Arg His Gln Gly Pro Leu
 245 250 255

<210> 2440

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2440

Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
 1 5 10 15

Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
 20 25 30

Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
 35 40 45

Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu Cys Asp
 50 55 60

Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
 65 70 75 80

Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
 85 90 95

Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
 100 105 110

Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
 115 120 125

His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
 130 135 140

Ile Gly Cys Ala Ala Phe Val Val Val Cys Ile Leu Gly Cys Ile Leu
 145 150 155 160

Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
 165 170 175

Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser

180

185

190

Arg Leu Thr Asp Val Thr Leu
195

<210> 2441

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2441

Met Ala Ala Glu Pro Val Glu Asp Asn Cys Ile Asn Phe Val Ala Met
1 5 10 15

Lys Phe Ile Asp Asn Thr Leu Tyr Phe Ile Ala Glu Asp Asp Glu Asn
20 25 30

Leu Glu Ser Asp Tyr Phe Gly Lys Leu Glu Ser Lys Leu Ser Val Ile
35 40 45

Arg Asn Leu Asn Asp Gln Val Leu Phe Ile Asp Gln Gly Asn Arg Pro
50 55 60

Leu Phe Glu Asp Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg
65 70 75 80

Thr Ile Phe Ile Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met
85 90 95

Ala Val Thr Ile Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys
100 105 110

Glu Asn Lys Ile Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile
115 120 125

Lys Asp Thr Lys Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly
130 135 140

His Asp Asn Lys Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe
145 150 155 160

Leu Ala Cys Glu Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys Lys
165 170 175

Glu Asp Glu Leu Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn Glu
180 185 190

Asp

<210> 2442
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 2442

Met Ser Arg Leu Pro Val Leu Leu Leu Leu Gln Leu Leu Val Arg Pro
 1 5 10 15

Gly Leu Gln Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp
 20 25 30

Val Asn Cys Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln
 35 40 45

Pro Pro Leu Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln
 50 55 60

Asp Ile Leu Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe
 65 70 75 80

Asn Arg Ala Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile
 85 90 95

Leu Lys Asn Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr
 100 105 110

Arg His Pro Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg
 115 120 125

Lys Leu Thr Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln
 130 135 140

Thr Thr Leu Ser Leu Ala Ile Phe
 145 150

<210> 2443
 <211> 1038
 <212> PRT
 <213> Homo sapiens

<400> 2443

Met Phe Pro Thr Glu Ser Ala Trp Leu Gly Lys Arg Gly Ala Asn Pro
 1 5 10 15

Gly Pro Glu Ala Ala Val Arg Glu Thr Val Met Leu Leu Leu Cys Leu
20 25 30

Gly Val Pro Thr Gly Arg Pro Tyr Asn Val Asp Thr Glu Ser Ala Leu
35 40 45

Leu Tyr Gln Gly Pro His Asn Thr Leu Phe Gly Tyr Ser Val Val Leu
50 55 60

His Ser His Gly Ala Asn Arg Trp Leu Leu Val Gly Ala Pro Thr Ala
65 70 75 80

Asn Trp Leu Ala Asn Ala Ser Val Ile Asn Pro Gly Ala Ile Tyr Arg
85 90 95

Cys Arg Ile Gly Lys Asn Pro Gly Gln Thr Cys Glu Gln Leu Gln Leu
100 105 110

Gly Ser Pro Asn Gly Glu Pro Cys Gly Lys Thr Cys Leu Glu Glu Arg
115 120 125

Asp Asn Gln Trp Leu Gly Val Thr Leu Ser Arg Gln Pro Gly Glu Asn
130 135 140

Gly Ser Ile Val Thr Cys Gly His Arg Trp Lys Asn Ile Phe Tyr Ile
145 150 155 160

Lys Asn Glu Asn Lys Leu Pro Thr Gly Gly Cys Tyr Gly Val Pro Pro
165 170 175

Asp Leu Arg Thr Glu Leu Ser Lys Arg Ile Ala Pro Cys Tyr Gln Asp
180 185 190

Tyr Val Lys Lys Phe Gly Glu Asn Phe Ala Ser Cys Gln Ala Gly Ile
195 200 205

Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro Gly Ser
210 215 220

Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Asn Ile Thr Thr Asn Lys
225 230 235 240

Tyr Lys Ala Phe Leu Asp Lys Gln Asn Gln Val Lys Phe Gly Ser Tyr
245 250 255

Leu Gly Tyr Ser Val Gly Ala Gly His Phe Arg Ser Gln His Thr Thr
 260 265 270

Glu Val Val Gly Gly Ala Pro Gln His Glu Gln Ile Gly Lys Ala Tyr
 275 280 285

Ile Phe Ser Ile Asp Glu Lys Glu Leu Asn Ile Leu His Glu Met Lys
 290 295 300

Gly Lys Lys Leu Gly Ser Tyr Phe Gly Ala Ser Val Cys Ala Val Asp
 305 310 315 320

Leu Asn Ala Asp Gly Phe Ser Asp Leu Leu Val Gly Ala Pro Met Gln
 325 330 335

Ser Thr Ile Arg Glu Glu Gly Arg Val Phe Val Tyr Ile Asn Ser Gly
 340 345 350

Ser Gly Ala Val Met Asn Ala Met Glu Thr Asn Leu Val Gly Ser Asp
 355 360 365

Lys Tyr Ala Ala Arg Phe Gly Glu Ser Ile Val Asn Leu Gly Asp Ile
 370 375 380

Asp Asn Asp Gly Phe Glu Asp Val Ala Ile Gly Ala Pro Gln Glu Asp
 385 390 395 400

Asp Leu Gln Gly Ala Ile Tyr Ile Tyr Asn Gly Arg Ala Asp Gly Ile
 405 410 415

Ser Ser Thr Phe Ser Gln Arg Ile Glu Gly Leu Gln Ile Ser Lys Ser
 420 425 430

Leu Ser Met Phe Gly Gln Ser Ile Ser Gly Gln Ile Asp Ala Asp Asn
 435 440 445

Asn Gly Tyr Val Asp Val Ala Val Gly Ala Phe Arg Ser Asp Ser Ala
 450 455 460

Val Leu Leu Arg Thr Arg Pro Val Val Ile Val Asp Ala Ser Leu Ser
 465 470 475 480

His Pro Glu Ser Val Asn Arg Thr Lys Phe Asp Cys Val Glu Asn Gly
 485 490 495

Trp Pro Ser Val Cys Ile Asp Leu Thr Leu Cys Phe Ser Tyr Lys Gly
 500 505 510

Lys Glu Val Pro Gly Tyr Ile Val Leu Phe Tyr Asn Met Ser Leu Asp
 515 520 525

Val Asn Arg Lys Ala Glu Ser Pro Pro Arg Phe Tyr Phe Ser Ser Asn
 530 535 540

Gly Thr Ser Asp Val Ile Thr Gly Ser Ile Gln Val Ser Ser Arg Glu
 545 550 555 560

Ala Asn Cys Arg Thr His Gln Ala Phe Met Arg Lys Asp Val Arg Asp
 565 570 575

Ile Leu Thr Pro Ile Gln Ile Glu Ala Ala Tyr His Leu Gly Pro His
 580 585 590

Val Ile Ser Lys Arg Ser Thr Glu Glu Phe Pro Pro Leu Gln Pro Ile
 595 600 605

Leu Gln Gln Lys Lys Glu Lys Asp Ile Met Lys Lys Thr Ile Asn Phe
 610 615 620

Ala Arg Phe Cys Ala His Glu Asn Cys Ser Ala Asp Leu Gln Val Ser
 625 630 635 640

Ala Lys Ile Gly Phe Leu Lys Pro His Glu Asn Lys Thr Tyr Leu Ala
 645 650 655

Val Gly Ser Met Lys Thr Leu Met Leu Asn Val Ser Leu Phe Asn Ala
 660 665 670

Gly Asp Asp Ala Tyr Glu Thr Thr Leu His Val Lys Leu Pro Val Gly
 675 680 685

Leu Tyr Phe Ile Lys Ile Leu Glu Leu Glu Glu Lys Gln Ile Asn Cys
 690 695 700

Glu Val Thr Asp Asn Ser Gly Val Val Gln Leu Asp Cys Ser Ile Gly
 705 710 715 720

Tyr Ile Tyr Val Asp His Leu Ser Arg Ile Asp Ile Ser Phe Leu Leu
 725 730 735

Asp Val Ser Ser Leu Ser Arg Ala Glu Glu Asp Leu Ser Ile Thr Val

740

745

750

His Ala Thr Cys Glu Asn Glu Glu Glu Met Asp Asn Leu Lys His Ser
 755 760 765

Arg Val Thr Val Ala Ile Pro Leu Lys Tyr Glu Val Lys Leu Thr Val
 770 775 780

His Gly Phe Val Asn Pro Thr Ser Phe Val Tyr Gly Ser Asn Asp Glu
 785 790 795 800

Asn Glu Pro Glu Thr Cys Met Val Glu Lys Met Asn Leu Thr Phe His
 805 810 815

Val Ile Asn Thr Gly Asn Ser Met Ala Pro Asn Val Ser Val Glu Ile
 820 825 830

Met Val Pro Asn Ser Phe Ser Pro Gln Thr Asp Lys Leu Phe Asn Ile
 835 840 845

Leu Asp Val Gln Thr Thr Thr Gly Glu Cys His Phe Glu Asn Tyr Gln
 850 855 860

Arg Val Cys Ala Leu Glu Gln Gln Lys Ser Ala Met Gln Thr Leu Lys
 865 870 875 880

Gly Ile Val Arg Phe Leu Ser Lys Thr Asp Lys Arg Leu Leu Tyr Cys
 885 890 895

Ile Lys Ala Asp Pro His Cys Leu Asn Phe Leu Cys Asn Phe Gly Lys
 900 905 910

Met Glu Ser Gly Lys Glu Ala Ser Val His Ile Gln Leu Glu Gly Arg
 915 920 925

Pro Ser Ile Leu Glu Met Asp Glu Thr Ser Ala Leu Lys Phe Glu Ile
 930 935 940

Arg Ala Thr Gly Phe Pro Glu Pro Asn Pro Arg Val Ile Glu Leu Asn
 945 950 955 960

Lys Asp Glu Asn Val Ala His Val Leu Leu Glu Gly Leu His His Gln
 965 970 975

Arg Pro Lys Arg Tyr Phe Thr Ile Val Ile Ile Ser Ser Ser Leu Leu
 980 985 990

Leu Gly Leu Ile Val Leu Leu Leu Ile Ser Tyr Val Met Trp Lys Ala
 995 1000 1005

Gly Phe Phe Lys Arg Gln Tyr Lys Ser Ile Leu Gln Glu Glu Asn
 1010 1015 1020

Arg Arg Asp Ser Trp Ser Tyr Ile Asn Ser Lys Ser Asn Asp Asp
 1025 1030 1035

<210> 2444
 <211> 1152
 <212> PRT
 <213> Homo sapiens

<400> 2444

Met Ala Leu Arg Val Leu Leu Leu Thr Ala Leu Thr Leu Cys His Gly
 1 5 10 15

Phe Asn Leu Asp Thr Glu Asn Ala Met Thr Phe Gln Glu Asn Ala Arg
 20 25 30

Gly Phe Gly Gln Ser Val Val Gln Leu Gln Gly Ser Arg Val Val Val
 35 40 45

Gly Ala Pro Gln Glu Ile Val Ala Ala Asn Gln Arg Gly Ser Leu Tyr
 50 55 60

Gln Cys Asp Tyr Ser Thr Gly Ser Cys Glu Pro Ile Arg Leu Gln Val
 65 70 75 80

Pro Val Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu Ala Ala Thr
 85 90 95

Thr Ser Pro Pro Gln Leu Leu Ala Cys Gly Pro Thr Val His Gln Thr
 100 105 110

Cys Ser Glu Asn Thr Tyr Val Lys Gly Leu Cys Phe Leu Phe Gly Ser
 115 120 125

Asn Leu Arg Gln Gln Pro Gln Lys Phe Pro Glu Ala Leu Arg Gly Cys
 130 135 140

Pro Gln Glu Asp Ser Asp Ile Ala Phe Leu Ile Asp Gly Ser Gly Ser
 145 150 155 160

Ile Ile Pro His Asp Phe Arg Arg Met Lys Glu Phe Val Ser Thr Val
 165 170 175

Met Glu Gln Leu Lys Lys Ser Lys Thr Leu Phe Ser Leu Met Gln Tyr
 180 185 190

Ser Glu Glu Phe Arg Ile His Phe Thr Phe Lys Glu Phe Gln Asn Asn
 195 200 205

Pro Asn Pro Arg Ser Leu Val Lys Pro Ile Thr Gln Leu Leu Gly Arg
 210 215 220

Thr His Thr Ala Thr Gly Ile Arg Lys Val Val Arg Glu Leu Phe Asn
 225 230 235 240

Ile Thr Asn Gly Ala Arg Lys Asn Ala Phe Lys Ile Leu Val Val Ile
 245 250 255

Thr Asp Gly Glu Lys Phe Gly Asp Pro Leu Gly Tyr Glu Asp Val Ile
 260 265 270

Pro Glu Ala Asp Arg Glu Gly Val Ile Arg Tyr Val Ile Gly Val Gly
 275 280 285

Asp Ala Phe Arg Ser Glu Lys Ser Arg Gln Glu Leu Asn Thr Ile Ala
 290 295 300

Ser Lys Pro Pro Arg Asp His Val Phe Gln Val Asn Asn Phe Glu Ala
 305 310 315 320

Leu Lys Thr Ile Gln Asn Gln Leu Arg Glu Lys Ile Phe Ala Ile Glu
 325 330 335

Gly Thr Gln Thr Gly Ser Ser Ser Ser Phe Glu His Glu Met Ser Gln
 340 345 350

Glu Gly Phe Ser Ala Ala Ile Thr Ser Asn Gly Pro Leu Leu Ser Thr
 355 360 365

Val Gly Ser Tyr Asp Trp Ala Gly Gly Val Phe Leu Tyr Thr Ser Lys
 370 375 380

Glu Lys Ser Thr Phe Ile Asn Met Thr Arg Val Asp Ser Asp Met Asn
 385 390 395 400

Asp Ala Tyr Leu Gly Tyr Ala Ala Ala Ile Ile Leu Arg Asn Arg Val

405										410					415				
Gln	Ser	Leu	Val	Leu	Gly	Ala	Pro	Arg	Tyr	Gln	His	Ile	Gly	Leu	Val				
			420						425						430				
Ala	Met	Phe	Arg	Gln	Asn	Thr	Gly	Met	Trp	Glu	Ser	Asn	Ala	Asn	Val				
			435					440						445					
Lys	Gly	Thr	Gln	Ile	Gly	Ala	Tyr	Phe	Gly	Ala	Ser	Leu	Cys	Ser	Val				
			450				455						460						
Asp	Val	Asp	Ser	Asn	Gly	Ser	Thr	Asp	Leu	Val	Leu	Ile	Gly	Ala	Pro				
465					470										480				
His	Tyr	Tyr	Glu	Gln	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Cys	Pro	Leu				
				485					490						495				
Pro	Arg	Gly	Arg	Ala	Arg	Trp	Gln	Cys	Asp	Ala	Val	Leu	Tyr	Gly	Glu				
				500				505						510					
Gln	Gly	Gln	Pro	Trp	Gly	Arg	Phe	Gly	Ala	Ala	Leu	Thr	Val	Leu	Gly				
			515				520							525					
Asp	Val	Asn	Gly	Asp	Lys	Leu	Thr	Asp	Val	Ala	Ile	Gly	Ala	Pro	Gly				
			530				535							540					
Glu	Glu	Asp	Asn	Arg	Gly	Ala	Val	Tyr	Leu	Phe	His	Gly	Thr	Ser	Gly				
545					550							555			560				
Ser	Gly	Ile	Ser	Pro	Ser	His	Ser	Gln	Arg	Ile	Ala	Gly	Ser	Lys	Leu				
					565				570						575				
Ser	Pro	Arg	Leu	Gln	Tyr	Phe	Gly	Gln	Ser	Leu	Ser	Gly	Gly	Gln	Asp				
				580				585						590					
Leu	Thr	Met	Asp	Gly	Leu	Val	Asp	Leu	Thr	Val	Gly	Ala	Gln	Gly	His				
				595				600						605					
Val	Leu	Leu	Leu	Arg	Ser	Gln	Pro	Val	Leu	Arg	Val	Lys	Ala	Ile	Met				
			610				615							620					
Glu	Phe	Asn	Pro	Arg	Glu	Val	Ala	Arg	Asn	Val	Phe	Glu	Cys	Asn	Asp				
625						630								635					640
Gln	Val	Val	Lys	Gly	Lys	Glu	Ala	Gly	Glu	Val	Arg	Val	Cys	Leu	His				
				645					650						655				

Val Gln Lys Ser Thr Arg Asp Arg Leu Arg Glu Gly Gln Ile Gln Ser
660 665 670

Val Val Thr Tyr Asp Leu Ala Leu Asp Ser Gly Arg Pro His Ser Arg
675 680 685

Ala Val Phe Asn Glu Thr Lys Asn Ser Thr Arg Arg Gln Thr Gln Val
690 695 700

Leu Gly Leu Thr Gln Thr Cys Glu Thr Leu Lys Leu Gln Leu Pro Asn
705 710 715 720

Cys Ile Glu Asp Pro Val Ser Pro Ile Val Leu Arg Leu Asn Phe Ser
725 730 735

Leu Val Gly Thr Pro Leu Ser Ala Phe Gly Asn Leu Arg Pro Val Leu
740 745 750

Ala Glu Asp Ala Gln Arg Leu Phe Thr Ala Leu Phe Pro Phe Glu Lys
755 760 765

Asn Cys Gly Asn Asp Asn Ile Cys Gln Asp Asp Leu Ser Ile Thr Phe
770 775 780

Ser Phe Met Ser Leu Asp Cys Leu Val Val Gly Gly Pro Arg Glu Phe
785 790 795 800

Asn Val Thr Val Thr Val Arg Asn Asp Gly Glu Asp Ser Tyr Arg Thr
805 810 815

Gln Val Thr Phe Phe Pro Leu Asp Leu Ser Tyr Arg Lys Val Ser
820 825 830

Thr Leu Gln Asn Gln Arg Ser Gln Arg Ser Trp Arg Leu Ala Cys Glu
835 840 845

Ser Ala Ser Ser Thr Glu Val Ser Gly Ala Leu Lys Ser Thr Ser Cys
850 855 860

Ser Ile Asn His Pro Ile Phe Pro Glu Asn Ser Glu Val Thr Phe Asn
865 870 875 880

Ile Thr Phe Asp Val Asp Ser Lys Ala Ser Leu Gly Asn Lys Leu Leu
885 890 895

Leu Lys Ala Asn Val Thr Ser Glu Asn Asn Met Pro Arg Thr Asn Lys
 900 905 910

Thr Glu Phe Gln Leu Glu Leu Pro Val Lys Tyr Ala Val Tyr Met Val
 915 920 925

Val Thr Ser His Gly Val Ser Thr Lys Tyr Leu Asn Phe Thr Ala Ser
 930 935 940

Glu Asn Thr Ser Arg Val Met Gln His Gln Tyr Gln Val Ser Asn Leu
 945 950 955 960

Gly Gln Arg Ser Pro Pro Ile Ser Leu Val Phe Leu Val Pro Val Arg
 965 970 975

Leu Asn Gln Thr Val Ile Trp Asp Arg Pro Gln Val Thr Phe Ser Glu
 980 985 990

Asn Leu Ser Ser Thr Cys His Thr Lys Glu Arg Leu Pro Ser His Ser
 995 1000 1005

Asp Phe Leu Ala Glu Leu Arg Lys Ala Pro Val Val Asn Cys Ser
 1010 1015 1020

Ile Ala Val Cys Gln Arg Ile Gln Cys Asp Ile Pro Phe Phe Gly
 1025 1030 1035

Ile Gln Glu Glu Phe Asn Ala Thr Leu Lys Gly Asn Leu Ser Phe
 1040 1045 1050

Asp Trp Tyr Ile Lys Thr Ser His Asn His Leu Leu Ile Val Ser
 1055 1060 1065

Thr Ala Glu Ile Leu Phe Asn Asp Ser Val Phe Thr Leu Leu Pro
 1070 1075 1080

Gly Gln Gly Ala Phe Val Arg Ser Gln Thr Glu Thr Lys Val Glu
 1085 1090 1095

Pro Phe Glu Val Pro Asn Pro Leu Pro Leu Ile Val Gly Ser Ser
 1100 1105 1110

Val Gly Gly Leu Leu Leu Leu Ala Leu Ile Thr Ala Ala Leu Tyr
 1115 1120 1125

Lys Leu Gly Phe Phe Lys Arg Gln Tyr Lys Asp Met Met Ser Glu
 1130 1135 1140

Gly Gly Pro Pro Gly Ala Glu Pro Gln
 1145 1150

<210> 2445.

<211> 798

<212> PRT

<213> Homo sapiens

<400> 2445

Met Val Ala Leu Pro Met Val Leu Val Leu Leu Val Leu Ser Arg
 1 5 10 15

Gly Glu Ser Glu Leu Asp Ala Lys Ile Pro Ser Thr Gly Asp Ala Thr
 20 25 30

Glu Trp Arg Asn Pro His Leu Ser Met Leu Gly Ser Cys Gln Pro Ala
 35 40 45

Pro Ser Cys Gln Lys Cys Ile Leu Ser His Pro Ser Cys Ala Trp Cys
 50 55 60

Lys Gln Leu Asn Phe Thr Ala Ser Gly Glu Ala Glu Ala Arg Arg Cys
 65 70 75 80

Ala Arg Arg Glu Glu Leu Leu Ala Arg Gly Cys Pro Leu Glu Glu Leu
 85 90 95

Glu Glu Pro Arg Gly Gln Gln Glu Val Leu Gln Asp Gln Pro Leu Ser
 100 105 110

Gln Gly Ala Arg Gly Glu Gly Ala Thr Gln Leu Ala Pro Gln Arg Val
 115 120 125

Arg Val Thr Leu Arg Pro Gly Glu Pro Gln Gln Leu Gln Val Arg Phe
 130 135 140

Leu Arg Ala Glu Gly Tyr Pro Val Asp Leu Tyr Tyr Leu Met Asp Leu
 145 150 155 160

Ser Tyr Ser Met Lys Asp Asp Leu Glu Arg Val Arg Gln Leu Gly His
 165 170 175

Ala Leu Leu Val Arg Leu Gln Glu Val Thr His Ser Val Arg Ile Gly
 180 185 190

Phe Gly Ser Phe Val Asp Lys Thr Val Leu Pro Phe Val Ser Thr Val
195 200 205

Pro Ser Lys Leu Arg His Pro Cys Pro Thr Arg Leu Glu Arg Cys Gln
210 215 220

Ser Pro Phe Ser Phe His His Val Leu Ser Leu Thr Gly Asp Ala Gln
225 230 235 240

Ala Phe Glu Arg Glu Val Gly Arg Gln Ser Val Ser Gly Asn Leu Asp
245 250 255

Ser Pro Glu Gly Gly Phe Asp Ala Ile Leu Gln Ala Ala Leu Cys Gln
260 265 270

Glu Gln Ile Gly Trp Arg Asn Val Ser Arg Leu Leu Val Phe Thr Ser
275 280 285

Asp Asp Thr Phe His Thr Ala Gly Asp Gly Lys Leu Gly Gly Ile Phe
290 295 300

Met Pro Ser Asp Gly His Cys His Leu Asp Ser Asn Gly Leu Tyr Ser
305 310 315 320

Arg Ser Thr Glu Phe Asp Tyr Pro Ser Val Gly Gln Val Ala Gln Ala
325 330 335

Leu Ser Ala Ala Asn Ile Gln Pro Ile Phe Ala Val Thr Ser Ala Ala
340 345 350

Leu Pro Val Tyr Gln Glu Leu Ser Lys Leu Ile Pro Lys Ser Ala Val
355 360 365

Gly Glu Leu Ser Glu Asp Ser Ser Asn Val Val Gln Leu Ile Met Asp
370 375 380

Ala Tyr Asn Ser Leu Ser Ser Thr Val Thr Leu Glu His Ser Ser Leu
385 390 395 400

Pro Pro Gly Val His Ile Ser Tyr Glu Ser Gln Cys Glu Gly Pro Glu
405 410 415

Lys Arg Glu Gly Lys Ala Glu Asp Arg Gly Gln Cys Asn His Val Arg
420 425 430

Ile Asn Gln Thr Val Thr Phe Trp Val Ser Leu Gln Ala Thr His Cys
 435 440 445

Leu Pro Glu Pro His Leu Leu Arg Leu Arg Ala Leu Gly Phe Ser Glu
 450 455 460

Glu Leu Ile Val Glu Leu His Thr Leu Cys Asp Cys Asn Cys Ser Asp
 465 470 475 480

Thr Gln Pro Gln Ala Pro His Cys Ser Asp Gly Gln Gly His Leu Gln
 485 490 495

Cys Gly Val Cys Ser Cys Ala Pro Gly Arg Leu Gly Arg Leu Cys Glu
 500 505 510

Cys Ser Val Ala Glu Leu Ser Ser Pro Asp Leu Glu Ser Gly Cys Arg
 515 520 525

Ala Pro Asn Gly Thr Gly Pro Leu Cys Ser Gly Lys Gly His Cys Gln
 530 535 540

Cys Gly Arg Cys Ser Cys Ser Gly Gln Ser Ser Gly His Leu Cys Glu
 545 550 555 560

Cys Asp Asp Ala Ser Cys Glu Arg His Glu Gly Ile Leu Cys Gly Gly
 565 570 575

Phe Gly Arg Cys Gln Cys Gly Val Cys His Cys His Ala Asn Arg Thr
 580 585 590

Gly Arg Ala Cys Glu Cys Ser Gly Asp Met Asp Ser Cys Ile Ser Pro
 595 600 605

Glu Gly Gly Leu Cys Ser Gly His Gly Arg Cys Lys Cys Asn Arg Cys
 610 615 620

Gln Cys Leu Asp Gly Tyr Tyr Gly Ala Leu Cys Asp Gln Cys Pro Gly
 625 630 635 640

Cys Lys Thr Pro Cys Glu Arg His Arg Asp Cys Ala Glu Cys Gly Ala
 645 650 655

Phe Arg Thr Gly Pro Leu Ala Thr Asn Cys Ser Thr Ala Cys Ala His
 660 665 670

Thr Asn Val Thr Leu Ala Leu Ala Pro Ile Leu Asp Asp Gly Trp Cys
675 680 685

Lys Glu Arg Thr Leu Asp Asn Gln Leu Phe Phe Phe Leu Val Glu Asp
690 695 700

Asp Ala Arg Gly Thr Val Val Leu Arg Val Arg Pro Gln Glu Lys Gly
705 710 715 720

Ala Asp His Thr Gln Ala Ile Val Leu Gly Cys Val Gly Gly Ile Val
725 730 735

Ala Val Gly Leu Gly Leu Val Leu Ala Tyr Arg Leu Ser Val Glu Ile
740 745 750

Tyr Asp Arg Arg Glu Tyr Ser Arg Phe Glu Lys Glu Gln Gln Leu
755 760 765

Asn Trp Lys Gln Asp Ser Asn Pro Leu Tyr Lys Ser Ala Ile Thr Thr
770 775 780

Thr Ile Asn Pro Arg Phe Gln Glu Ala Asp Ser Pro Thr Leu
785 790 795

<210> 2446
<211> 345
<212> PRT
<213> Homo sapiens

<400> 2446

Met Gln Arg Leu Val Ala Trp Asp Pro Ala Cys Leu Pro Leu Pro Pro
1 5 10 15

Pro Pro Pro Ala Phe Lys Ser Met Glu Val Ala Asn Phe Tyr Tyr Glu
20 25 30

Ala Asp Cys Leu Ala Ala Ala Tyr Gly Gly Lys Ala Ala Pro Ala Ala
35 40 45

Pro Pro Ala Ala Arg Pro Gly Pro Arg Pro Pro Ala Gly Glu Leu Gly
50 55 60

Ser Ile Gly Asp His Glu Arg Ala Ile Asp Phe Ser Pro Tyr Leu Glu
65 70 75 80

Pro Leu Gly Ala Pro Gln Ala Pro Ala Pro Ala Thr Ala Thr Asp Thr
85 90 95

Phe Glu Ala Ala Pro Pro Ala Pro Ala Pro Ala Pro Ala Ser Ser Gly
 100 105 110

Gln His His Asp Phe Leu Ser Asp Leu Phe Ser Asp Asp Tyr Gly Gly
 115 120 125

Lys Asn Cys Lys Lys Pro Ala Glu Tyr Gly Tyr Val Ser Leu Gly Arg
 130 135 140

Leu Gly Ala Ala Lys Gly Ala Leu His Pro Gly Cys Phe Ala Pro Leu
 145 150 155 160

His Pro Pro Pro Pro Pro Pro Pro Pro Pro Ala Glu Leu Lys Ala Glu
 165 170 175

Pro Gly Phe Glu Pro Ala Asp Cys Lys Arg Lys Glu Glu Ala Gly Ala
 180 185 190

Pro Gly Gly Gly Ala Gly Met Ala Ala Gly Phe Pro Tyr Ala Leu Arg
 195 200 205

Ala Tyr Leu Gly Tyr Gln Ala Val Pro Ser Gly Ser Ser Gly Ser Leu
 210 215 220

Ser Thr Ser Ser Ser Ser Ser Pro Pro Gly Thr Pro Ser Pro Ala Asp
 225 230 235 240

Ala Lys Ala Pro Pro Thr Ala Cys Tyr Ala Gly Ala Ala Pro Ala Pro
 245 250 255

Ser Gln Val Lys Ser Lys Ala Lys Lys Thr Val Asp Lys His Ser Asp
 260 265 270

Glu Tyr Lys Ile Arg Arg Glu Arg Asn Asn Ile Ala Val Arg Lys Ser
 275 280 285

Arg Asp Lys Ala Lys Met Arg Asn Leu Glu Thr Gln His Lys Val Leu
 290 295 300

Glu Leu Thr Ala Glu Asn Glu Arg Leu Gln Lys Lys Val Glu Gln Leu
 305 310 315 320

Ser Arg Glu Leu Ser Thr Leu Arg Asn Leu Phe Lys Gln Leu Pro Glu
 325 330 335

Pro Leu Leu Ala Ser Ser Gly His Cys
 340 345

<210> 2447
 <211> 373
 <212> PRT
 <213> Homo sapiens

<400> 2447

Met Ser Pro Cys Pro Pro Gln Gln Ser Arg Asn Arg Val Ile Gln Leu
 1 5 10 15

Ser Thr Ser Glu Leu Gly Glu Met Glu Leu Thr Trp Gln Glu Ile Met
 20 25 30

Ser Ile Thr Glu Leu Gln Gly Leu Asn Ala Pro Ser Glu Pro Ser Phe
 35 40 45

Glu Pro Gln Ala Pro Ala Pro Tyr Leu Gly Pro Pro Pro Thr Thr
 50 55 60

Tyr Cys Pro Cys Ser Ile His Pro Asp Ser Gly Phe Pro Leu Pro Pro
 65 70 75 80

Pro Pro Tyr Glu Leu Pro Ala Ser Thr Ser His Val Pro Asp Pro Pro
 85 90 95

Tyr Ser Tyr Gly Asn Met Ala Ile Pro Val Ser Lys Pro Leu Ser Leu
 100 105 110

Ser Gly Leu Leu Ser Glu Pro Leu Gln Asp Pro Leu Ala Leu Leu Asp
 115 120 125

Ile Gly Leu Pro Ala Gly Pro Pro Lys Pro Gln Glu Asp Pro Glu Ser
 130 135 140

Asp Ser Gly Leu Ser Leu Asn Tyr Ser Asp Ala Glu Ser Leu Glu Leu
 145 150 155 160

Glu Gly Thr Glu Ala Gly Arg Arg Arg Ser Glu Tyr Val Glu Met Tyr
 165 170 175

Pro Val Glu Tyr Pro Tyr Ser Leu Met Pro Asn Ser Leu Ala His Ser
 180 185 190

Asn Tyr Thr Leu Pro Ala Ala Glu Thr Pro Leu Ala Leu Glu Pro Ser

195 200 205

Ser Gly 210 Pro Val Arg Ala Lys 215 Pro Thr Ala Arg Gly 220 Glu Ala Gly Ser

Arg Asp 225 Glu Arg Arg Ala 230 Leu Ala Met Lys 235 Ile Pro Phe Pro Thr Asp 240

Lys Ile Val Asn 245 Leu Pro Val Asp Asp Phe 250 Asn Glu Leu Leu Ala 255

Tyr Pro Leu Thr 260 Glu Ser Gln Leu Ala 265 Leu Val Arg Asp Ile Arg Arg 270

Arg Gly 275 Lys Asn Lys Val Ala 280 Ala Gln Asn Cys Arg 285 Lys Arg Lys Leu

Glu Thr 290 Ile Val Gln Leu Glu 295 Arg Glu Leu Glu Arg 300 Leu Thr Asn Glu

Arg Glu 305 Arg Leu Leu Arg Ala 310 Arg Gly Glu Ala 315 Asp Arg Thr Leu Glu 320

Val Met Arg Gln 325 Gln Leu Thr Glu Leu Tyr 330 Arg Asp Ile Phe Gln His 335

Leu Arg Asp 340 Glu Ser Gly Asn Ser Tyr 345 Ser Pro Glu Glu Tyr 350 Ala Leu

Gln Gln 355 Ala Asp Gly Thr 360 Ile Phe Leu Val Pro Arg 365 Gly Thr Lys

Met Glu 370 Ala Thr Asp

<210> 2448
<211> 288
<212> PRT
<213> Homo sapiens

<400> 2448

Met Gln Ile Pro 5 Gln Ala Pro Trp 10 Val Val Trp Ala Val 15 Leu Gln 1

Leu Gly Trp Arg 20 Pro Gly Trp Phe 25 Leu Asp Ser Pro Asp Arg 30 Pro Trp 3

Asn Pro Pro Thr Phe Phe Pro Ala Leu Leu Val Val Thr Glu Gly Asp
 35 40 45

Asn Ala Thr Phe Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val
 50 55 60

Leu Asn Trp Tyr Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala
 65 70 75 80

Ala Phe Pro Glu Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg
 85 90 95

Val Thr Gln Leu Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg
 100 105 110

Ala Arg Arg Asn Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser Leu
 115 120 125

Ala Pro Lys Ala Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val
 130 135 140

Thr Glu Arg Arg Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro
 145 150 155 160

Arg Pro Ala Gly Gln Phe Gln Thr Leu Val Val Gly Val Val Gly Gly
 165 170 175

Leu Leu Gly Ser Leu Val Leu Leu Val Trp Val Leu Ala Val Ile Cys
 180 185 190

Ser Arg Ala Ala Arg Gly Thr Ile Gly Ala Arg Arg Thr Gly Gln Pro
 195 200 205

Leu Lys Glu Asp Pro Ser Ala Val Pro Val Phe Ser Val Asp Tyr Gly
 210 215 220

Glu Leu Asp Phe Gln Trp Arg Glu Lys Thr Pro Glu Pro Pro Val Pro
 225 230 235 240

Cys Val Pro Glu Gln Thr Glu Tyr Ala Thr Ile Val Phe Pro Ser Gly
 245 250 255

Met Gly Thr Ser Ser Pro Ala Arg Arg Gly Ser Ala Asp Gly Pro Arg
 260 265 270

Ser Ala Gln Pro Leu Arg Pro Glu Asp Gly His Cys Ser Trp Pro Leu
 275 280 285

<210> 2449
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2449

Met Ser Ser Ala Ala Gly Phe Cys Ala Ser Arg Pro Gly Leu Leu Phe
 1 5 10 15

Leu Gly Leu Leu Leu Leu Pro Leu Val Val Ala Phe Ala Ser Ala Glu
 20 25 30

Ala Glu Glu Asp Gly Asp Leu Gln Cys Leu Cys Val Lys Thr Thr Ser
 35 40 45

Gln Val Arg Pro Arg His Ile Thr Ser Leu Glu Val Ile Lys Ala Gly
 50 55 60

Pro His Cys Pro Thr Ala Gln Leu Ile Ala Thr Leu Lys Asn Gly Arg
 65 70 75 80

Lys Ile Cys Leu Asp Leu Gln Ala Pro Leu Tyr Lys Lys Ile Ile Lys
 85 90 95

Lys Leu Leu Glu Ser
 100

<210> 2450
 <211> 706
 <212> PRT
 <213> Homo sapiens

<400> 2450

Met Ser Pro Phe Leu Arg Ile Gly Leu Ser Asn Phe Asp Cys Gly Ser
 1 5 10 15

Cys Gln Ser Cys Gln Gly Glu Ala Val Asn Pro Tyr Cys Ala Val Leu
 20 25 30

Val Lys Glu Tyr Val Glu Ser Glu Asn Gly Gln Met Tyr Ile Gln Lys
 35 40 45

Lys Pro Thr Met Tyr Pro Pro Trp Asp Ser Thr Phe Asp Ala His Ile
 50 55 60

Asn Lys Gly Arg Val Met Gln Ile Ile Val Lys Gly Lys Asn Val Asp
 65 70 75 80
 Leu Ile Ser Glu Thr Thr Val Glu Leu Tyr Ser Leu Ala Glu Arg Cys
 85 90 95
 Arg Lys Asn Asn Gly Lys Thr Glu Ile Trp Leu Glu Leu Lys Pro Gln
 100 105 110
 Gly Arg Met Leu Met Asn Ala Arg Tyr Phe Leu Glu Met Ser Asp Thr
 115 120 125
 Lys Asp Met Asn Glu Phe Glu Thr Glu Gly Phe Phe Ala Leu His Gln
 130 135 140
 Arg Arg Gly Ala Ile Lys Gln Ala Lys Val His His Val Lys Cys His
 145 150 155 160
 Glu Phe Thr Ala Thr Phe Phe Pro Gln Pro Thr Phe Cys Ser Val Cys
 165 170 175
 His Glu Phe Val Trp Gly Leu Asn Lys Gln Gly Tyr Gln Cys Arg Gln
 180 185 190
 Cys Asn Ala Ala Ile His Lys Lys Cys Ile Asp Lys Val Ile Ala Lys
 195 200 205
 Cys Thr Gly Ser Ala Ile Asn Ser Arg Glu Thr Met Phe His Lys Glu
 210 215 220
 Arg Phe Lys Ile Asp Met Pro His Arg Phe Lys Val Tyr Asn Tyr Lys
 225 230 235 240
 Ser Pro Thr Phe Cys Glu His Cys Gly Thr Leu Leu Trp Gly Leu Ala
 245 250 255
 Arg Gln Gly Leu Lys Cys Asp Ala Cys Gly Met Asn Val His His Arg
 260 265 270
 Cys Gln Thr Lys Val Ala Asn Leu Cys Gly Ile Asn Gln Lys Leu Met
 275 280 285
 Ala Glu Ala Leu Ala Met Ile Glu Ser Thr Gln Gln Ala Arg Cys Leu
 290 295 300

Arg Asp Thr Glu Gln Ile Phe Arg Glu Gly Pro Val Glu Ile Gly Leu
305 310 315 320

Pro Cys Ser Ile Lys Asn Glu Ala Arg Pro Pro Cys Leu Pro Thr Pro
325 330 335

Gly Lys Arg Glu Pro Gln Gly Ile Ser Trp Glu Ser Pro Leu Asp Glu
340 345 350

Val Asp Lys Met Cys His Leu Pro Glu Pro Glu Leu Asn Lys Glu Arg
355 360 365

Pro Ser Leu Gln Ile Lys Leu Lys Ile Glu Asp Phe Ile Leu His Lys
370 375 380

Met Leu Gly Lys Gly Ser Phe Gly Lys Val Phe Leu Ala Glu Phe Lys
385 390 395 400

Lys Thr Asn Gln Phe Phe Ala Ile Lys Ala Leu Lys Lys Asp Val Val
405 410 415

Leu Met Asp Asp Asp Val Glu Cys Thr Met Val Glu Lys Arg Val Leu
420 425 430

Ser Leu Ala Trp Glu His Pro Phe Leu Thr His Met Phe Cys Thr Phe
435 440 445

Gln Thr Lys Glu Asn Leu Phe Phe Val Met Glu Tyr Leu Asn Gly Gly
450 455 460

Asp Leu Met Tyr His Ile Gln Ser Cys His Lys Phe Asp Leu Ser Arg
465 470 475 480

Ala Thr Phe Tyr Ala Ala Glu Ile Ile Leu Gly Leu Gln Phe Leu His
485 490 495

Ser Lys Gly Ile Val Tyr Arg Asp Leu Lys Leu Asp Asn Ile Leu Leu
500 505 510

Asp Lys Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu
515 520 525

Asn Met Leu Gly Asp Ala Lys Thr Asn Thr Phe Cys Gly Thr Pro Asp
530 535 540

Tyr Ile Ala Pro Glu Ile Leu Leu Gly Gln Lys Tyr Asn His Ser Val

545 550 555 560

Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly Gln
565 570 575

Ser Pro Phe His Gly Gln Asp Glu Glu Glu Leu Phe His Ser Ile Arg
580 585 590

Met Asp Asn Pro Phe Tyr Pro Arg Trp Leu Glu Lys Glu Ala Lys Asp
595 600 605

Leu Leu Val Lys Leu Phe Val Arg Glu Pro Glu Lys Arg Leu Gly Val
610 615 620

Arg Gly Asp Ile Arg Gln His Pro Leu Phe Arg Glu Ile Asn Trp Glu
625 630 635 640

Glu Leu Glu Arg Lys Glu Ile Asp Pro Pro Phe Arg Pro Lys Val Lys
645 650 655

Ser Pro Phe Asp Cys Ser Asn Phe Asp Lys Glu Phe Leu Asn Glu Lys
660 665 670

Pro Arg Leu Ser Phe Ala Asp Arg Ala Leu Ile Asn Ser Met Asp Gln
675 680 685

Asn Met Phe Arg Asn Phe Ser Phe Met Asn Pro Gly Met Glu Arg Leu
690 695 700

Ile Ser
705

```
<210> 2451
<211> 798
<212> PRT
<213> Homo sapiens
```

<400> 2451

Met Ala Trp Asp Met Cys Asn Gln Asp Ser Glu Ser Val Trp Ser Asp
1 5 10 15

Ile Glu Cys Ala Ala Leu Val Gly Glu Asp Gln Pro Leu Cys Pro Asp
20 25 30

Leu Pro Glu Leu Asp Leu Ser Glu Leu Asp Val Asn Asp Leu Asp Thr
35 40 45

Asp Ser Phe Leu Gly Gly Leu Lys Trp Cys Ser Asp Gln Ser Glu Ile
 50 55 60

Ile Ser Asn Gln Tyr Asn Asn Glu Pro Ser Asn Ile Phe Glu Lys Ile
 65 70 75 80

Asp Glu Glu Asn Glu Ala Asn Leu Leu Ala Val Leu Thr Glu Thr Leu
 85 90 95

Asp Ser Leu Pro Val Asp Glu Asp Gly Leu Pro Ser Phe Asp Ala Leu
 100 105 110

Thr Asp Gly Asp Val Thr Thr Asp Asn Glu Ala Ser Pro Ser Ser Met
 115 120 125

Pro Asp Gly Thr Pro Pro Pro Gln Glu Ala Glu Glu Pro Ser Leu Leu
 130 135 140

Lys Lys Leu Leu Leu Ala Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu
 145 150 155 160

Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile
 165 170 175

Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys
 180 185 190

Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser
 195 200 205

Glu Leu Leu Lys Tyr Leu Thr Thr Asn Asp Asp Pro Pro His Thr Lys
 210 215 220

Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys
 225 230 235 240

Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr
 245 250 255

Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly
 260 265 270

Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu
 275 280 285

Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala
 290 295 300

Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys
 305 310 315 320

Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser
 325 330 335

Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser
 340 345 350

Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His
 355 360 365

Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His
 370 375 380

Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile
 385 390 395 400

Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser
 405 410 415

Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys
 420 425 430

Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser
 435 440 445

Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys
 450 455 460

His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys
 465 470 475 480

Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys
 485 490 495

Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp
 500 505 510

Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr
 515 520 525

Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn

530	535	540
Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln 545 550 555 560		
Arg Pro Gln Arg Met Arg Ser Arg Ser Arg Ser Phe Ser Arg His Arg 565 570 575		
Ser Cys Ser Arg Ser Pro Tyr Ser Arg Ser Arg Ser Arg Ser Pro Gly 580 585 590		
Ser Arg Ser Ser Ser Arg Ser Cys Tyr Tyr Tyr Glu Ser Ser His Tyr 595 600 605		
Arg His Arg Thr His Arg Asn Ser Pro Leu Tyr Val Arg Ser Arg Ser 610 615 620		
Arg Ser Pro Tyr Ser Arg Arg Pro Arg Tyr Asp Ser Tyr Glu Glu Tyr 625 630 635 640		
Gln His Glu Arg Leu Lys Arg Glu Glu Tyr Arg Arg Glu Tyr Glu Lys 645 650 655		
Arg Glu Ser Glu Arg Ala Lys Gln Arg Glu Arg Gln Arg Gln Lys Ala 660 665 670		
Ile Glu Glu Arg Arg Val Ile Tyr Val Gly Lys Ile Arg Pro Asp Thr 675 680 685		
Thr Arg Thr Glu Leu Arg Asp Arg Phe Glu Val Phe Gly Glu Ile Glu 690 695 700		
Glu Cys Thr Val Asn Leu Arg Asp Asp Gly Asp Ser Tyr Gly Phe Ile 705 710 715 720		
Thr Tyr Arg Tyr Thr Cys Asp Ala Phe Ala Ala Leu Glu Asn Gly Tyr 725 730 735		
Thr Leu Arg Arg Ser Asn Glu Thr Asp Phe Glu Leu Tyr Phe Cys Gly 740 745 750		
Arg Lys Gln Phe Phe Lys Ser Asn Tyr Ala Asp Leu Asp Ser Asn Ser 755 760 765		
Asp Asp Phe Asp Pro Ala Ser Thr Lys Ser Lys Tyr Asp Ser Leu Asp 770 775 780		

Phe Asp Ser Leu Leu Lys Glu Ala Gln Arg Ser Leu Arg Arg
 785 790 795

<210> 2452
 <211> 1043
 <212> PRT
 <213> Homo sapiens

<400> 2452

Met Ala Ala Ser Phe Pro Pro Thr Leu Gly Leu Ser Ser Ala Pro Asp
 1 5 10 15

Glu Ile Gln His Pro His Ile Lys Phe Ser Glu Trp Lys Phe Lys Leu
 20 25 30

Phe Arg Val Arg Ser Phe Glu Lys Thr Pro Glu Glu Ala Gln Lys Glu
 35 40 45

Lys Lys Asp Ser Phe Glu Gly Lys Pro Ser Leu Glu Gln Ser Pro Ala
 50 55 60

Val Leu Asp Lys Ala Asp Gly Gln Lys Pro Val Pro Thr Gln Pro Leu
 65 70 75 80

Leu Lys Ala His Pro Lys Phe Ser Lys Lys Phe His Asp Asn Glu Lys
 85 90 95

Ala Arg Gly Lys Ala Ile His Gln Ala Asn Leu Arg His Leu Cys Arg
 100 105 110

Ile Cys Gly Asn Ser Phe Arg Ala Asp Glu His Asn Arg Arg Tyr Pro
 115 120 125

Val His Gly Pro Val Asp Gly Lys Thr Leu Gly Leu Leu Arg Lys Lys
 130 135 140

Glu Lys Arg Ala Thr Ser Trp Pro Asp Leu Ile Ala Lys Val Phe Arg
 145 150 155 160

Ile Asp Val Lys Ala Asp Val Asp Ser Ile His Pro Thr Glu Phe Cys
 165 170 175

His Asn Cys Trp Ser Ile Met His Arg Lys Phe Ser Ser Ala Pro Cys
 180 185 190

Glu Val Tyr Phe Pro Arg Asn Val Thr Met Glu Trp His Pro His Thr
 195 200 205

Pro Ser Cys Asp Ile Cys Asn Thr Ala Arg Arg Gly Leu Lys Arg Lys
 210 215 220

Ser Leu Gln Pro Asn Leu Gln Leu Ser Lys Lys Leu Lys Thr Val Leu
 225 230 235 240

Asp Gln Ala Arg Gln Ala Arg Gln Arg Lys Arg Arg Ala Gln Ala Arg
 245 250 255

Ile Ser Ser Lys Asp Val Met Lys Lys Ile Ala Asn Cys Ser Lys Ile
 260 265 270

His Leu Ser Thr Lys Leu Leu Ala Val Asp Phe Pro Glu His Phe Val
 275 280 285

Lys Ser Ile Ser Cys Gln Ile Cys Glu His Ile Leu Ala Asp Pro Val
 290 295 300

Glu Thr Asn Cys Lys His Val Phe Cys Arg Val Cys Ile Leu Arg Cys
 305 310 315 320

Leu Lys Val Met Gly Ser Tyr Cys Pro Ser Cys Arg Tyr Pro Cys Phe
 325 330 335

Pro Thr Asp Leu Glu Ser Pro Val Lys Ser Phe Leu Ser Val Leu Asn
 340 345 350

Ser Leu Met Val Lys Cys Pro Ala Lys Glu Cys Asn Glu Glu Val Ser
 355 360 365

Leu Glu Lys Tyr Asn His His Ile Ser Ser His Lys Glu Ser Lys Glu
 370 375 380

Ile Phe Val His Ile Asn Lys Gly Gly Arg Pro Arg Gln His Leu Leu
 385 390 395 400

Ser Leu Thr Arg Arg Ala Gln Lys His Arg Leu Arg Glu Leu Lys Leu
 405 410 415

Gln Val Lys Ala Phe Ala Asp Lys Glu Glu Gly Gly Asp Val Lys Ser
 420 425 430

Val Cys Met Thr Leu Phe Leu Leu Ala Leu Arg Ala Arg Asn Glu His

435	440	445
Arg Gln Ala Asp Glu Leu	Glu Ala Ile Met Gln Gly	Lys Gly Ser Gly
450	455	460
Leu Gln Pro Ala Val Cys	Leu Ala Ile Arg Val Asn Thr	Phe Leu Ser
465	470	475
Cys Ser Gln Tyr His Lys	Met Tyr Arg Thr Val Lys	Ala Ile Thr Gly
485	490	495
Arg Gln Ile Phe Gln Pro	Leu His Ala Leu Arg Asn	Ala Glu Lys Val
500	505	510
Leu Leu Pro Gly Tyr His	His Phe Glu Trp Gln Pro	Pro Leu Lys Asn
515	520	525
Val Ser Ser Ser Thr Asp	Val Gly Ile Ile Asp Gly	Leu Ser Gly Leu
530	535	540
Ser Ser Ser Val Asp Asp	Tyr Pro Val Asp Thr Ile	Ala Lys Arg Phe
545	550	555
Arg Tyr Asp Ser Ala Leu	Val Ser Ala Leu Met Asp	Met Glu Glu Asp
565	570	575
Ile Leu Glu Gly Met Arg	Ser Gln Asp Leu Asp Asp	Tyr Leu Asn Gly
580	585	590
Pro Phe Thr Val Val Val	Lys Glu Ser Cys Asp Gly	Met Gly Asp Val
595	600	605
Ser Glu Lys His Gly Ser	Gly Pro Val Val Pro Glu	Lys Ala Val Arg
610	615	620
Phe Ser Phe Thr Ile Met	Lys Ile Thr Ile Ala His	Ser Ser Gln Asn
625	630	635
Val Lys Val Phe Glu Glu	Ala Lys Pro Asn Ser Glu	Leu Cys Cys Lys
645	650	655
Pro Leu Cys Leu Met Leu	Ala Asp Glu Ser Asp His	Glu Thr Leu Thr
660	665	670
Ala Ile Leu Ser Pro Leu	Ile Ala Glu Arg Glu Ala	Met Lys Ser Ser
675	680	685

Glu Leu Met Leu Glu Leu Gly Gly Ile Leu Arg Thr Phe Lys Phe Ile
690 695 700

Phe Arg Gly Thr Gly Tyr Asp Glu Lys Leu Val Arg Glu Val Glu Gly
705 710 715 720

Leu Glu Ala Ser Gly Ser Val Tyr Ile Cys Thr Leu Cys Asp Ala Thr
725 730 735

Arg Leu Glu Ala Ser Gln Asn Leu Val Phe His Ser Ile Thr Arg Ser
740 745 750

His Ala Glu Asn Leu Glu Arg Tyr Glu Val Trp Arg Ser Asn Pro Tyr
755 760 765

His Glu Ser Val Glu Glu Leu Arg Asp Arg Val Lys Gly Val Ser Ala
770 775 780

Lys Pro Phe Ile Glu Thr Val Pro Ser Ile Asp Ala Leu His Cys Asp
785 790 795 800

Ile Gly Asn Ala Ala Glu Phe Tyr Lys Ile Phe Gln Leu Glu Ile Gly
805 810 815

Glu Val Tyr Lys Asn Pro Asn Ala Ser Lys Glu Glu Arg Lys Arg Trp
820 825 830

Gln Ala Thr Leu Asp Lys His Leu Arg Lys Lys Met Asn Leu Lys Pro
835 840 845

Ile Met Arg Met Asn Gly Asn Phe Ala Arg Lys Leu Met Thr Lys Glu
850 855 860

Thr Val Asp Ala Val Cys Glu Leu Ile Pro Ser Glu Glu Arg His Glu
865 870 875 880

Ala Leu Arg Glu Leu Met Asp Leu Tyr Leu Lys Met Lys Pro Val Trp
885 890 895

Arg Ser Ser Cys Pro Ala Lys Glu Cys Pro Glu Ser Leu Cys Gln Tyr
900 905 910

Ser Phe Asn Ser Gln Arg Phe Ala Glu Leu Leu Ser Thr Lys Phe Lys
915 920 925

Tyr Arg Tyr Glu Gly Lys Ile Thr Asn Tyr Phe His Lys Thr Leu Ala
930 935 940

His Val Pro Glu Ile Ile Glu Arg Asp Gly Ser Ile Gly Ala Trp Ala
945 950 955 960

Ser Glu Gly Asn Glu Ser Gly Asn Lys Leu Phe Arg Arg Phe Arg Lys
965 970 975

Met Asn Ala Arg Gln Ser Lys Cys Tyr Glu Met Glu Asp Val Leu Lys
980 985 990

His His Trp Leu Tyr Thr Ser Lys Tyr Leu Gln Lys Phe Met Asn Ala
995 1000 1005

His Asn Ala Leu Lys Thr Ser Gly Phe Thr Met Asn Pro Gln Ala
1010 1015 1020

Ser Leu Gly Asp Pro Leu Gly Ile Glu Asp Ser Leu Glu Ser Gln
1025 1030 1035

Asp Ser Met Glu Phe
1040

<210> 2453

<211> 527

<212> PRT

<213> Homo sapiens

<400> 2453

Met Ser Leu Gln Met Val Thr Val Ser Asn Asn Ile Ala Leu Ile Gln
1 5 10 15

Pro Gly Phe Ser Leu Met Asn Phe Asp Gly Gln Val Phe Phe Phe Gly
20 25 30

Gln Lys Gly Trp Pro Lys Arg Ser Cys Pro Thr Gly Val Phe His Leu
35 40 45

Asp Val Lys His Asn His Val Lys Leu Lys Pro Thr Ile Phe Ser Lys
50 55 60

Asp Ser Cys Tyr Leu Pro Pro Leu Arg Tyr Pro Ala Thr Cys Thr Phe
65 70 75 80

Lys Gly Ser Leu Glu Ser Glu Lys His Gln Tyr Ile Ile His Gly Gly

[illegible]

Gln Val Val Ser Glu Gly Phe Tyr Phe Tyr Met Leu Lys Cys Ala Glu
 340 345 350

Asp Asp Thr Asn Glu Glu Gln Thr Thr Phe Thr Asn Ser Gln Thr Ser
 355 360 365

Thr Glu Asp Pro Gly Asp Ser Thr Pro Phe Glu Asp Ser Glu Glu Phe
 370 375 380

Cys Phe Ser Ala Glu Ala Asn Ser Phe Asp Gly Asp Asp Glu Phe Asp
 385 390 395 400

Thr Tyr Asn Glu Asp Asp Glu Glu Asp Glu Ser Glu Thr Gly Tyr Trp
 405 410 415

Ile Thr Cys Cys Pro Thr Cys Asp Val Asp Ile Asn Thr Trp Val Pro
 420 425 430

Phe Tyr Ser Thr Glu Leu Asn Lys Pro Ala Met Ile Tyr Cys Ser His
 435 440 445

Gly Asp Gly His Trp Val His Ala Gln Cys Met Asp Leu Ala Glu Arg
 450 455 460

Thr Leu Ile His Leu Ser Ala Gly Ser Asn Lys Tyr Tyr Cys Asn Glu
 465 470 475 480

His Val Glu Ile Ala Arg Ala Leu His Thr Pro Gln Arg Val Leu Pro
 485 490 495

Leu Lys Lys Pro Pro Met Lys Ser Leu Arg Lys Lys Gly Ser Gly Lys
 500 505 510

Ile Leu Thr Pro Ala Lys Lys Ser Phe Leu Arg Arg Leu Phe Asp
 515 520 525

<210> 2454

<211> 93

<212> PRT

<213> Homo sapiens

<400> 2454

Met Asn Ala Lys Val Val Val Val Leu Val Leu Val Leu Thr Ala Leu
 1 5 10 15

Cys Leu Ser Asp Gly Lys Pro Val Ser Leu Ser Tyr Arg Cys Pro Cys
20 25 30

Arg Phe Phe Glu Ser His Val Ala Arg Ala Asn Val Lys His Leu Lys
35 40 45

Ile Leu Asn Thr Pro Asn Cys Ala Leu Gln Ile Val Ala Arg Leu Lys
50 55 60

Asn Asn Asn Arg Gln Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln
65 70 75 80

Glu Tyr Leu Glu Lys Ala Leu Asn Lys Arg Phe Lys Met
85 90

<210> 2455

<211> 277

<212> PRT

<213> Homo sapiens

<400> 2455

Met Cys Val Gly Ala Arg Arg Leu Gly Arg Gly Pro Cys Ala Ala Leu
1 5 10 15

Leu Leu Leu Gly Leu Gly Leu Ser Thr Val Thr Gly Leu His Cys Val
20 25 30

Gly Asp Thr Tyr Pro Ser Asn Asp Arg Cys Cys His Glu Cys Arg Pro
35 40 45

Gly Asn Gly Met Val Ser Arg Cys Ser Arg Ser Gln Asn Thr Val Cys
50 55 60

Arg Pro Cys Gly Pro Gly Phe Tyr Asn Asp Val Val Ser Ser Lys Pro
65 70 75 80

Cys Lys Pro Cys Thr Trp Cys Asn Leu Arg Ser Gly Ser Glu Arg Lys
85 90 95

Gln Leu Cys Thr Ala Thr Gln Asp Thr Val Cys Arg Cys Arg Ala Gly
100 105 110

Thr Gln Pro Leu Asp Ser Tyr Lys Pro Gly Val Asp Cys Ala Pro Cys
115 120 125

Pro Pro Gly His Phe Ser Pro Gly Asp Asn Gln Ala Cys Lys Pro Trp
130 135 140

Thr Asn Cys Thr Leu Ala Gly Lys His Thr Leu Gln Pro Ala Ser Asn
145 150 155 160

Ser Ser Asp Ala Ile Cys Glu Asp Arg Asp Pro Pro Ala Thr Gln Pro
165 170 175

Gln Glu Thr Gln Gly Pro Pro Ala Arg Pro Ile Thr Val Gln Pro Thr
180 185 190

Glu Ala Trp Pro Arg Thr Ser Gln Gly Pro Ser Thr Arg Pro Val Glu
195 200 205

Val Pro Gly Gly Arg Ala Val Ala Ala Ile Leu Gly Leu Gly Leu Val
210 215 220

Leu Gly Leu Leu Gly Pro Leu Ala Ile Leu Leu Ala Leu Tyr Leu Leu
225 230 235 240

Arg Arg Asp Gln Arg Leu Pro Pro Asp Ala His Lys Pro Pro Gly Gly
245 250 255

Gly Ser Phe Arg Thr Pro Ile Gln Glu Glu Gln Ala Asp Ala His Ser
260 265 270

Thr Leu Ala Lys Ile
275

<210> 2456

<211> 183

<212> PRT

<213> Homo sapiens

<400> 2456

Met Glu Arg Val Gln Pro Leu Glu Glu Asn Val Gly Asn Ala Ala Arg
1 5 10 15

Pro Arg Phe Glu Arg Asn Lys Leu Leu Val Ala Ser Val Ile Gln
20 25 30

Gly Leu Gly Leu Leu Leu Cys Phe Thr Tyr Ile Cys Leu His Phe Ser
35 40 45

Ala Leu Gln Val Ser His Arg Tyr Pro Arg Ile Gln Ser Ile Lys Val
50 55 60

Gln Phe Thr Glu Tyr Lys Lys Glu Lys Gly Phe Ile Leu Thr Ser Gln
65 70 75 80

Lys Glu Asp Glu Ile Met Lys Val Gln Asn Asn Ser Val Ile Ile Asn
85 90 95

Cys Asp Gly Phe Tyr Leu Ile Ser Leu Lys Gly Tyr Phe Ser Gln Glu
100 105 110

Val Asn Ile Ser Leu His Tyr Gln Lys Asp Glu Glu Pro Leu Phe Gln
115 120 125

Leu Lys Lys Val Arg Ser Val Asn Ser Leu Met Val Ala Ser Leu Thr
130 135 140

Tyr Lys Asp Lys Val Tyr Leu Asn Val Thr Thr Asp Asn Thr Ser Leu
145 150 155 160

Asp Asp Phe His Val Asn Gly Gly Glu Leu Ile Leu Ile His Gln Asn
165 170 175

Pro Gly Glu Phe Cys Val Leu
180

<210> 2457

<211> 275

<212> PRT

<213> Homo sapiens

<400> 2457

Met Leu Ser Leu Leu Leu Leu Ala Leu Pro Val Leu Ala Ser Arg Ala
1 5 10 15

Tyr Ala Ala Pro Ala Pro Val Gln Ala Leu Gln Gln Ala Gly Ile Val
20 25 30

Gly Gly Gln Glu Ala Pro Arg Ser Lys Trp Pro Trp Gln Val Ser Leu
35 40 45

Arg Val Arg Asp Arg Tyr Trp Met His Phe Cys Gly Gly Ser Leu Ile
50 55 60

His Pro Gln Trp Val Leu Thr Ala Ala His Cys Leu Gly Pro Asp Val
65 70 75 80

Lys Asp Leu Ala Thr Leu Arg Val Gln Leu Arg Glu Gln His Leu Tyr
85 90 95

Tyr Gln Asp Gln Leu Leu Pro Val Ser Arg Ile Ile Val His Pro Gln
 100 105 110

Phe Tyr Ile Ile Gln Thr Gly Ala Asp Ile Ala Leu Leu Glu Leu Glu
 115 120 125

Glu Pro Val Asn Ile Ser Ser Arg Val His Thr Val Met Leu Pro Pro
 130 135 140

Ala Ser Glu Thr Phe Pro Pro Gly Met Pro Cys Trp Val Thr Gly Trp
 145 150 155 160

Gly Asp Val Asp Asn Asp Glu Pro Leu Pro Pro Phe Pro Leu Lys
 165 170 175

Gln Val Lys Val Pro Ile Met Glu Asn His Ile Cys Asp Ala Lys Tyr
 180 185 190

His Leu Gly Ala Tyr Thr Gly Asp Asp Val Arg Ile Ile Arg Asp Asp
 195 200 205

Met Leu Cys Ala Gly Asn Ser Gln Arg Asp Ser Cys Lys Gly Asp Ser
 210 215 220

Gly Gly Pro Leu Val Cys Lys Val Asn Gly Thr Trp Leu Gln Ala Gly
 225 230 235 240

Val Val Ser Trp Asp Glu Gly Cys Ala Gln Pro Asn Arg Pro Gly Ile
 245 250 255

Tyr Thr Arg Val Thr Tyr Tyr Leu Asp Trp Ile His His Tyr Val Pro
 260 265 270

Lys Lys Pro
 275

<210> 2458
 <211> 363
 <212> PRT
 <213> Homo sapiens

<400> 2458

Met Ala Gln Thr Pro Ala Phe Asp Lys Pro Lys Val Glu Leu His Val
 1 5 10 15

His Leu Asp Gly Ser Ile Lys Pro Glu Thr Ile Leu Tyr Tyr Gly Arg
20 25 30

Arg Arg Gly Ile Ala Leu Pro Ala Asn Thr Ala Glu Gly Leu Leu Asn
35 40 45

Val Ile Gly Met Asp Lys Pro Leu Thr Leu Pro Asp Phe Leu Ala Lys
50 55 60

Phe Asp Tyr Tyr Met Pro Ala Ile Ala Gly Cys Arg Glu Ala Ile Lys
65 70 75 80

Arg Ile Ala Tyr Glu Phe Val Glu Met Lys Ala Lys Glu Gly Val Val
85 90 95

Tyr Val Glu Val Arg Tyr Ser Pro His Leu Leu Ala Asn Ser Lys Val
100 105 110

Glu Pro Ile Pro Trp Asn Gln Ala Glu Gly Asp Leu Thr Pro Asp Glu
115 120 125

Val Val Ala Leu Val Gly Gln Gly Leu Gln Glu Gly Glu Arg Asp Phe
130 135 140

Gly Val Lys Ala Arg Ser Ile Leu Cys Cys Met Arg His Gln Pro Asn
145 150 155 160

Trp Ser Pro Lys Val Val Glu Leu Cys Lys Asn Tyr Gln Gln Gln Thr
165 170 175

Val Val Ala Ile Asp Leu Ala Gly Asp Glu Thr Ile Pro Gly Ser Ser
180 185 190

Leu Leu Pro Gly His Val Gln Ala Tyr Gln Glu Ala Val Lys Ser Gly
195 200 205

Ile His Arg Thr Val His Ala Gly Glu Val Gly Ser Ala Glu Val Val
210 215 220

Lys Glu Ala Val Asp Ile Leu Lys Thr Glu Arg Leu Gly His Gly Tyr
225 230 235 240

His Thr Leu Glu Asp Gln Ala Leu Tyr Asn Arg Leu Arg Gln Glu Asn
245 250 255

Met His Phe Glu Ile Cys Pro Trp Ser Ser Tyr Leu Thr Gly Ala Trp

260

265

270

Lys Pro Asp Thr Glu His Ala Val Ile Arg Leu Lys Asn Asp Gln Ala
 275 280 285

Asn Tyr Ser Leu Asn Thr Asp Asp Pro Leu Ile Phe Lys Ser Thr Leu
 290 295 300

Asp Thr Asp Tyr Gln Met Thr Lys Arg Asp Met Gly Phe Thr Glu Glu
 305 310 315 320

Glu Phe Lys Arg Leu Asn Ile Asn Ala Ala Lys Ser Ser Phe Leu Pro
 325 330 335

Glu Asp Glu Lys Arg Glu Leu Leu Asp Leu Leu Tyr Lys Ala Tyr Gly
 340 345 350

Met Pro Pro Ser Ala Ser Ala Gly Gln Asn Leu
 355 360

<210> 2459

<211> 443

<212> PRT

<213> Homo sapiens

<400> 2459

Met Asp Phe Pro Cys Leu Trp Leu Gly Leu Leu Leu Pro Leu Val Ala
 1 5 10 15

Ala Leu Asp Phe Asn Tyr His Arg Gln Glu Gly Met Glu Ala Phe Leu
 20 25 30

Lys Thr Val Ala Gln Asn Tyr Ser Ser Val Thr His Leu His Ser Ile
 35 40 45

Gly Lys Ser Val Lys Gly Arg Asn Leu Trp Val Leu Val Val Gly Arg
 50 55 60

Phe Pro Lys Glu His Arg Ile Gly Ile Pro Glu Phe Lys Tyr Val Ala
 65 70 75 80

Asn Met His Gly Asp Glu Thr Val Gly Arg Glu Leu Leu Leu His Leu
 85 90 95

Ile Asp Tyr Leu Val Thr Ser Asp Gly Lys Asp Pro Glu Ile Thr Asn
 100 105 110

Leu Ile Asn Ser Thr Arg Ile His Ile Met Pro Ser Met Asn Pro Asp
 115 120 125

Gly Phe Glu Ala Val Lys Lys Pro Asp Cys Tyr Tyr Ser Ile Gly Arg
 130 135 140

Glu Asn Tyr Asn Gln Tyr Asp Leu Asn Arg Asn Phe Pro Asp Ala Phe
 145 150 155 160

Glu Tyr Asn Asn Val Ser Arg Gln Pro Glu Thr Val Ala Val Met Lys
 165 170 175

Trp Leu Lys Thr Glu Thr Phe Val Leu Ser Ala Asn Leu His Gly Gly
 180 185 190

Ala Leu Val Ala Ser Tyr Pro Phe Asp Asn Gly Val Gln Ala Thr Gly
 195 200 205

Ala Leu Tyr Ser Arg Ser Leu Thr Pro Asp Asp Asp Val Phe Gln Tyr
 210 215 220

Leu Ala His Thr Tyr Ala Ser Arg Asn Pro Asn Met Lys Lys Gly Asp
 225 230 235 240

Glu Cys Lys Asn Lys Met Asn Phe Pro Asn Gly Val Thr Asn Gly Tyr
 245 250 255

Ser Trp Tyr Pro Leu Gln Gly Gly Met Gln Asp Tyr Asn Tyr Ile Trp
 260 265 270

Ala Gln Cys Phe Glu Ile Thr Leu Glu Leu Ser Cys Cys Lys Tyr Pro
 275 280 285

Arg Glu Glu Lys Leu Pro Ser Phe Trp Asn Asn Asn Lys Ala Ser Leu
 290 295 300

Ile Glu Tyr Ile Lys Gln Val His Leu Gly Val Lys Gly Gln Val Phe
 305 310 315 320

Asp Gln Asn Gly Asn Pro Leu Pro Asn Val Ile Val Glu Val Gln Asp
 325 330 335

Arg Lys His Ile Cys Pro Tyr Arg Thr Asn Lys Tyr Gly Glu Tyr Tyr
 340 345 350

Leu Leu Leu Leu Pro Gly Ser Tyr Ile Ile Asn Val Thr Val Pro Gly
 355 360 365

His Asp Pro His Ile Thr Lys Val Ile Ile Pro Glu Lys Ser Gln Asn
 370 375 380

Phe Ser Ala Leu Lys Lys Asp Ile Leu Leu Pro Phe Gln Gly Gln Leu
 385 390 395 400

Asp Ser Ile Pro Val Ser Asn Pro Ser Cys Pro Met Ile Pro Leu Tyr
 405 410 415

Arg Asn Leu Pro Asp His Ser Ala Ala Thr Lys Pro Ser Leu Phe Leu
 420 425 430

Phe Leu Val Ser Leu Leu His Ile Phe Phe Lys
 435 440

<210> 2460

<211> 144

<212> PRT

<213> Homo sapiens

<400> 2460

Met Trp Leu Gln Ser Leu Leu Leu Leu Gly Thr Val Ala Cys Ser Ile
 1 5 10 15

Ser Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His
 20 25 30

Val Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp
 35 40 45

Thr Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe
 50 55 60

Asp Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys
 65 70 75 80

Gln Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met
 85 90 95

Met Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser
 100 105 110

Cys Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys
 115 120 125

Asp Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu
 130 135 140

<210> 2461
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 2461

Met Ala Gly Pro Ala Thr Gln Ser Pro Met Lys Leu Met Ala Leu Gln
 1 5 10 15

Leu Leu Leu Trp His Ser Ala Leu Trp Thr Val Gln Glu Ala Thr Pro
 20 25 30

Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu
 35 40 45

Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln Glu Lys
 50 55 60

Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val Leu Leu
 65 70 75 80

Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys Pro Ser
 85 90 95

Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser Gly Leu
 100 105 110

Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser Pro Glu
 115 120 125

Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp Phe Ala
 130 135 140

Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro Ala Leu
 145 150 155 160

Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe Gln Arg
 165 170 175

Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe Leu Glu
 180 185 190

Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
 195 200

<210> 2462
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 2462

Met Glu Lys Leu Leu Cys Phe Leu Val Leu Thr Ser Leu Ser His Ala
 1 5 10 15

Phe Gly Gln Thr Asp Met Ser Arg Lys Ala Phe Val Phe Pro Lys Glu
 20 25 30

Ser Asp Thr Ser Tyr Val Ser Leu Lys Ala Pro Leu Thr Lys Pro Leu
 35 40 45

Lys Ala Phe Thr Val Cys Leu His Phe Tyr Thr Glu Leu Ser Ser Thr
 50 55 60

Arg Gly Thr Val Phe Ser Arg Met Pro Pro Arg Asp Lys Thr Met Arg
 65 70 75 80

Phe Phe Ile Phe Trp Ser Lys Asp Ile Gly Tyr Ser Phe Thr Val Gly
 85 90 95

Gly Ser Glu Ile Leu Phe Glu Val Pro Glu Val Thr Val Ala Pro Val
 100 105 110

His Ile Cys Thr Ser Trp Glu Ser Ala Ser Gly Ile Val Glu Phe Trp
 115 120 125

Val Asp Gly Lys Pro Arg Val Arg Lys Ser Leu Lys Lys Gly Tyr Thr
 130 135 140

Val Gly Ala Glu Ala Ser Ile Ile Leu Gly Gln Glu Gln Asp Ser Phe
 145 150 155 160

Gly Gly Asn Phe Glu Gly Ser Gln Ser Leu Val Gly Asp Ile Gly Asn
 165 170 175

Val Asn Met Trp Asp Phe Val Leu Ser Pro Asp Glu Ile Asn Thr Ile
 180 185 190

Tyr Leu Gly Gly Pro Phe Ser Pro Asn Val Leu Asn Trp Arg Ala Leu
 195 200 205

Lys Tyr Glu Val Gln Gly Glu Val Phe Thr Lys Pro Gln Leu Trp Pro
 210 215 220

<210> 2463
 <211> 993
 <212> PRT
 <213> Homo sapiens

<400> 2463

Met Pro Ala Leu Ala Arg Asp Ala Gly Thr Val Pro Leu Leu Val Val
 1 5 10 15

Phe Ser Ala Met Ile Phe Gly Thr Ile Thr Asn Gln Asp Leu Pro Val
 20 25 30

Ile Lys Cys Val Leu Ile Asn His Lys Asn Asn Asp Ser Ser Val Gly
 35 40 45

Lys Ser Ser Ser Tyr Pro Met Val Ser Glu Ser Pro Glu Asp Leu Gly
 50 55 60

Cys Ala Leu Arg Pro Gln Ser Ser Gly Thr Val Tyr Glu Ala Ala Ala
 65 70 75 80

Val Glu Val Asp Val Ser Ala Ser Ile Thr Leu Gln Val Leu Val Asp
 85 90 95

Ala Pro Gly Asn Ile Ser Cys Leu Trp Val Phe Lys His Ser Ser Leu
 100 105 110

Asn Cys Gln Pro His Phe Asp Leu Gln Asn Arg Gly Val Val Ser Met
 115 120 125

Val Ile Leu Lys Met Thr Glu Thr Gln Ala Gly Glu Tyr Leu Leu Phe
 130 135 140

Ile Gln Ser Glu Ala Thr Asn Tyr Thr Ile Leu Phe Thr Val Ser Ile
 145 150 155 160

Arg Asn Thr Leu Leu Tyr Thr Leu Arg Arg Pro Tyr Phe Arg Lys Met
 165 170 175

Glu Asn Gln Asp Ala Leu Val Cys Ile Ser Glu Ser Val Pro Glu Pro
 180 185 190

Ile Val Glu Trp Val Leu Cys Asp Ser Gln Gly Glu Ser Cys Lys Glu
 195 200 205

Glu Ser Pro Ala Val Val Lys Lys Glu Glu Lys Val Leu His Glu Leu
 210 215 220

Phe Gly Thr Asp Ile Arg Cys Cys Ala Arg Asn Glu Leu Gly Arg Glu
 225 230 235 240

Cys Thr Arg Leu Phe Thr Ile Asp Leu Asn Gln Thr Pro Gln Thr Thr
 245 250 255

Leu Pro Gln Leu Phe Leu Lys Val Gly Glu Pro Leu Trp Ile Arg Cys
 260 265 270

Lys Ala Val His Val Asn His Gly Phe Gly Leu Thr Trp Glu Leu Glu
 275 280 285

Asn Lys Ala Leu Glu Glu Gly Asn Tyr Phe Glu Met Ser Thr Tyr Ser
 290 295 300

Thr Asn Arg Thr Met Ile Arg Ile Leu Phe Ala Phe Val Ser Ser Val
 305 310 315 320

Ala Arg Asn Asp Thr Gly Tyr Tyr Thr Cys Ser Ser Ser Lys His Pro
 325 330 335

Ser Gln Ser Ala Leu Val Thr Ile Val Gly Lys Gly Phe Ile Asn Ala
 340 345 350

Thr Asn Ser Ser Glu Asp Tyr Glu Ile Asp Gln Tyr Glu Glu Phe Cys
 355 360 365

Phe Ser Val Arg Phe Lys Ala Tyr Pro Gln Ile Arg Cys Thr Trp Thr
 370 375 380

Phe Ser Arg Lys Ser Phe Pro Cys Glu Gln Lys Gly Leu Asp Asn Gly
 385 390 395 400

Tyr Ser Ile Ser Lys Phe Cys Asn His Lys His Gln Pro Gly Glu Tyr
 405 410 415

Ile Phe His Ala Glu Asn Asp Asp Ala Gln Phe Thr Lys Met Phe Thr
 420 425 430

Leu Asn Ile Arg Arg Lys Pro Gln Val Leu Ala Glu Ala Ser Ala Ser

435					440					445						
Gln	Ala	Ser	Cys	Phe	Ser	Asp	Gly	Tyr	Pro	Leu	Pro	Ser	Trp	Thr	Trp	
450					455					460						
Lys	Lys	Cys	Ser	Asp	Lys	Ser	Pro	Asn	Cys	Thr	Glu	Glu	Ile	Thr	Glu	
465					470					475					480	
Gly	Val	Trp	Asn	Arg	Lys	Ala	Asn	Arg	Lys	Val	Phe	Gly	Gln	Trp	Val	
485					490					495						
Ser	Ser	Ser	Thr	Leu	Asn	Met	Ser	Glu	Ala	Ile	Lys	Gly	Phe	Leu	Val	
500					505					510						
Lys	Cys	Cys	Ala	Tyr	Asn	Ser	Leu	Gly	Thr	Ser	Cys	Glu	Thr	Ile	Leu	
515					520					525						
Leu	Asn	Ser	Pro	Gly	Pro	Phe	Pro	Phe	Ile	Gln	Asp	Asn	Ile	Ser	Phe	
530					535					540						
Tyr	Ala	Thr	Ile	Gly	Val	Cys	Leu	Leu	Phe	Ile	Val	Val	Leu	Thr	Leu	
545					550					555					560	
Leu	Ile	Cys	His	Lys	Tyr	Lys	Lys	Gln	Phe	Arg	Tyr	Glu	Ser	Gln	Leu	
565					570					575						
Gln	Met	Val	Gln	Val	Thr	Gly	Ser	Ser	Asp	Asn	Glu	Tyr	Phe	Tyr	Val	
580					585					590						
Asp	Phe	Arg	Glu	Tyr	Glu	Tyr	Asp	Leu	Lys	Trp	Glu	Phe	Pro	Arg	Glu	
595					600					605						
Asn	Leu	Glu	Phe	Gly	Lys	Val	Leu	Gly	Ser	Gly	Ala	Phe	Gly	Lys	Val	
610					615					620						
Met	Asn	Ala	Thr	Ala	Tyr	Gly	Ile	Ser	Lys	Thr	Gly	Val	Ser	Ile	Gln	
625					630					635					640	
Val	Ala	Val	Lys	Met	Leu	Lys	Glu	Lys	Ala	Asp	Ser	Ser	Glu	Arg	Glu	
645					650					655						
Ala	Leu	Met	Ser	Glu	Leu	Lys	Met	Met	Thr	Gln	Leu	Gly	Ser	His	Glu	
660					665					670						
Asn	Ile	Val	Asn	Leu	Leu	Gly	Ala	Cys	Thr	Leu	Ser	Gly	Pro	Ile	Tyr	
675					680					685						

Leu Ile Phe Glu Tyr Cys Cys Tyr Gly Asp Leu Leu Asn Tyr Leu Arg
 690 695 700

Ser Lys Arg Glu Lys Phe His Arg Thr Trp Thr Glu Ile Phe Lys Glu
 705 710 715 720

His Asn Phe Ser Phe Tyr Pro Thr Phe Gln Ser His Pro Asn Ser Ser
 725 730 735

Met Pro Gly Ser Arg Glu Val Gln Ile His Pro Asp Ser Asp Gln Ile
 740 745 750

Ser Gly Leu His Gly Asn Ser Phe His Ser Glu Asp Glu Ile Glu Tyr
 755 760 765

Glu Asn Gln Lys Arg Leu Glu Glu Glu Asp Leu Asn Val Leu Thr
 770 775 780

Phe Glu Asp Leu Leu Cys Phe Ala Tyr Gln Val Ala Lys Gly Met Glu
 785 790 795 800

Phe Leu Glu Phe Lys Ser Cys Val His Arg Asp Leu Ala Ala Arg Asn
 805 810 815

Val Leu Val Thr His Gly Lys Val Val Lys Ile Cys Asp Phe Gly Leu
 820 825 830

Ala Arg Asp Ile Met Ser Asp Ser Asn Tyr Val Val Arg Gly Asn Ala
 835 840 845

Arg Leu Pro Val Lys Trp Met Ala Pro Glu Ser Leu Phe Glu Gly Ile
 850 855 860

Tyr Thr Ile Lys Ser Asp Val Trp Ser Tyr Gly Ile Leu Leu Trp Glu
 865 870 875 880

Ile Phe Ser Leu Gly Val Asn Pro Tyr Pro Gly Ile Pro Val Asp Ala
 885 890 895

Asn Phe Tyr Lys Leu Ile Gln Asn Gly Phe Lys Met Asp Gln Pro Phe
 900 905 910

Tyr Ala Thr Glu Glu Ile Tyr Ile Ile Met Gln Ser Cys Trp Ala Phe
 915 920 925

Asp Ser Arg Lys Arg Pro Ser Phe Pro Asn Leu Thr Ser Phe Leu Gly
 930 935 940

Cys Gln Leu Ala Asp Ala Glu Glu Ala Met Tyr Gln Asn Val Asp Gly
 945 950 955 960

Arg Val Ser Glu Cys Pro His Thr Tyr Gln Asn Arg Arg Pro Phe Ser
 965 970 975

Arg Glu Met Asp Leu Gly Leu Leu Ser Pro Gln Ala Gln Val Glu Asp
 980 985 990

Ser

<210> 2464

<211> 443

<212> FRT

<213> Homo sapiens

<400> 2464

Met Glu Val Thr Ala Asp Gln Pro Arg Trp Val Ser His His His Pro
 1 5 10 15

Ala Val Leu Asn Gly Gln His Pro Asp Thr His His Pro Gly Leu Ser
 20 25 30

His Ser Tyr Met Asp Ala Ala Gln Tyr Pro Leu Pro Glu Glu Val Asp
 35 40 45

Val Leu Phe Asn Ile Asp Gly Gln Gly Asn His Val Pro Pro Tyr Tyr
 50 55 60

Gly Asn Ser Val Arg Ala Thr Val Gln Arg Tyr Pro Pro Thr His His
 65 70 75 80

Gly Ser Gln Val Cys Arg Pro Pro Leu Leu His Gly Ser Leu Pro Trp
 85 90 95

Leu Asp Gly Gly Lys Ala Leu Gly Ser His His Thr Ala Ser Pro Trp
 100 105 110

Asn Leu Ser Pro Phe Ser Lys Thr Ser Ile His His Gly Ser Pro Gly
 115 120 125

Pro Leu Ser Val Tyr Pro Pro Ala Ser Ser Ser Ser Leu Ser Gly Gly

130

135

140

His Ala Ser Pro His Leu Phe Thr Phe Pro Pro Thr Pro Pro Lys Asp
 145 150 155 160

Val Ser Pro Asp Pro Ser Leu Ser Thr Pro Gly Ser Ala Gly Ser Ala
 165 170 175

Arg Gln Asp Glu Lys Glu Cys Leu Lys Tyr Gln Val Pro Leu Pro Asp
 180 185 190

Ser Met Lys Leu Glu Ser Ser His Ser Arg Gly Ser Met Thr Ala Leu
 195 200 205

Gly Gly Ala Ser Ser Ser Thr His His Pro Ile Thr Thr Tyr Pro Pro
 210 215 220

Tyr Val Pro Glu Tyr Ser Ser Gly Leu Phe Pro Pro Ser Ser Leu Leu
 225 230 235 240

Gly Gly Ser Pro Thr Gly Phe Gly Cys Lys Ser Arg Pro Lys Ala Arg
 245 250 255

Ser Ser Thr Gly Arg Glu Cys Val Asn Cys Gly Ala Thr Ser Thr Pro
 260 265 270

Leu Trp Arg Arg Asp Gly Thr Gly His Tyr Leu Cys Asn Ala Cys Gly
 275 280 285

Leu Tyr His Lys Met Asn Gly Gln Asn Arg Pro Leu Ile Lys Pro Lys
 290 295 300

Arg Arg Leu Ser Ala Ala Arg Arg Ala Gly Thr Ser Cys Ala Asn Cys
 305 310 315 320

Gln Thr Thr Thr Thr Thr Leu Trp Arg Arg Asn Ala Asn Gly Asp Pro
 325 330 335

Val Cys Asn Ala Cys Gly Leu Tyr Tyr Lys Leu His Asn Ile Asn Arg
 340 345 350

Pro Leu Thr Met Lys Lys Glu Gly Ile Gln Thr Arg Asn Arg Lys Met
 355 360 365

Ser Ser Lys Ser Lys Lys Cys Lys Lys Val His Asp Ser Leu Glu Asp
 370 375 380

Phe Pro Lys Asn Ser Ser Phe Asn Pro Ala Ala Leu Ser Arg His Met
 385 390 395 400

Ser Ser Leu Ser His Ile Ser Pro Phe Ser His Ser Ser His Met Leu
 405 410 415

Thr Thr Pro Thr Pro Met His Pro Pro Ser Ser Leu Ser Phe Gly Pro
 420 425 430

His His Pro Ser Ser Met Val Thr Ala Met Gly
 435 440

<210> 2465

<211> 459

<212> PRT

<213> Homo sapiens

<400> 2465

Met Thr Ile Leu Gly Thr Thr Phe Gly Met Val Phe Ser Leu Leu Gln
 1 5 10 15

Val Val Ser Gly Glu Ser Gly Tyr Ala Gln Asn Gly Asp Leu Glu Asp
 20 25 30

Ala Glu Leu Asp Asp Tyr Ser Phe Ser Cys Tyr Ser Gln Leu Glu Val
 35 40 45

Asn Gly Ser Gln His Ser Leu Thr Cys Ala Phe Glu Asp Pro Asp Val
 50 55 60

Asn Ile Thr Asn Leu Glu Phe Glu Ile Cys Gly Ala Leu Val Glu Val
 65 70 75 80

Lys Cys Leu Asn Phe Arg Lys Leu Gln Glu Ile Tyr Phe Ile Glu Thr
 85 90 95

Lys Lys Phe Leu Leu Ile Gly Lys Ser Asn Ile Cys Val Lys Val Gly
 100 105 110

Glu Lys Ser Leu Thr Cys Lys Lys Ile Asp Leu Thr Thr Ile Val Lys
 115 120 125

Pro Glu Ala Pro Phe Asp Leu Ser Val Val Tyr Arg Glu Gly Ala Asn
 130 135 140

Asp Phe Val Val Thr Phe Asn Thr Ser His Leu Gln Lys Lys Tyr Val
 145 150 155 160

Lys Val Leu Met His Asp Val Ala Tyr Arg Gln Glu Lys Asp Glu Asn
 165 170 175

Lys Trp Thr His Val Asn Leu Ser Ser Thr Lys Leu Thr Leu Leu Gln
 180 185 190

Arg Lys Leu Gln Pro Ala Ala Met Tyr Glu Ile Lys Val Arg Ser Ile
 195 200 205

Pro Asp His Tyr Phe Lys Gly Phe Trp Ser Glu Trp Ser Pro Ser Tyr
 210 215 220

Tyr Phe Arg Thr Pro Glu Ile Asn Asn Ser Ser Gly Glu Met Asp Pro
 225 230 235 240

Ile Leu Leu Thr Ile Ser Ile Leu Ser Phe Phe Ser Val Ala Leu Leu
 245 250 255

Val Ile Leu Ala Cys Val Leu Trp Lys Lys Arg Ile Lys Pro Ile Val
 260 265 270

Trp Pro Ser Leu Pro Asp His Lys Lys Thr Leu Glu His Leu Cys Lys
 275 280 285

Lys Pro Arg Lys Asn Leu Asn Val Ser Phe Asn Pro Glu Ser Phe Leu
 290 295 300

Asp Cys Gln Ile His Arg Val Asp Asp Ile Gln Ala Arg Asp Glu Val
 305 310 315 320

Glu Gly Phe Leu Gln Asp Thr Phe Pro Gln Gln Leu Glu Glu Ser Glu
 325 330 335

Lys Gln Arg Leu Gly Gly Asp Val Gln Ser Pro Asn Cys Pro Ser Glu
 340 345 350

Asp Val Val Ile Thr Pro Glu Ser Phe Gly Arg Asp Ser Ser Leu Thr
 355 360 365

Cys Leu Ala Gly Asn Val Ser Ala Cys Asp Ala Pro Ile Leu Ser Ser
 370 375 380

Ser Arg Ser Leu Asp Cys Arg Glu Ser Gly Lys Asn Gly Pro His Val

385 390 395 400
 Tyr Gln Asp Leu Leu Leu Ser Leu Gly Thr Thr Asn Ser Thr Leu Pro
 405 410 415
 Pro Pro Phe Ser Leu Gln Ser Gly Ile Leu Thr Leu Asn Pro Val Ala
 420 425 430
 Gln Gly Gln Pro Ile Leu Thr Ser Leu Gly Ser Asn Gln Glu Glu Ala
 435 440 445
 Tyr Val Thr Met Ser Ser Phe Tyr Gln Asn Gln
 450 455
 <210> 2466
 <211> 362
 <212> PRT
 <213> Homo sapiens
 <400> 2466
 Met Ala Thr Ala Glu Thr Ala Leu Pro Ser Ile Ser Thr Leu Thr Ala
 1 5 10 15
 Leu Gly Pro Phe Pro Asp Thr Gln Asp Asp Phe Leu Lys Trp Trp Arg
 20 25 30
 Ser Glu Glu Ala Gln Asp Met Gly Pro Gly Pro Pro Asp Pro Thr Glu
 35 40 45
 Pro Pro Leu His Val Lys Ser Glu Asp Gln Pro Gly Glu Glu Glu Asp
 50 55 60
 Asp Glu Arg Gly Ala Asp Ala Thr Trp Asp Leu Asp Leu Leu Leu Thr
 65 70 75 80
 Asn Phe Ser Gly Pro Glu Pro Gly Gly Ala Pro Gln Thr Cys Ala Leu
 85 90 95
 Ala Pro Ser Glu Ala Ser Gly Ala Gln Tyr Pro Pro Pro Pro Glu Thr
 100 105 110
 Leu Gly Ala Tyr Ala Gly Gly Pro Gly Leu Val Ala Gly Leu Leu Gly
 115 120 125
 Ser Glu Asp His Ser Gly Trp Val Arg Pro Ala Leu Arg Ala Arg Ala
 130 135 140

Pro Asp Ala Phe Val Gly Pro Ala Leu Ala Pro Ala Pro Ala Pro Glu
145 150 155 160

Pro Lys Ala Leu Ala Leu Gln Pro Val Tyr Pro Gly Pro Gly Ala Gly
165 170 175

Ser Ser Gly Gly Tyr Phe Pro Arg Thr Gly Leu Ser Val Pro Ala Ala
180 185 190

Ser Gly Ala Pro Tyr Gly Leu Leu Ser Gly Tyr Pro Ala Met Tyr Pro
195 200 205

Ala Pro Gln Tyr Gln Gly His Phe Gln Leu Phe Arg Gly Leu Gln Gly
210 215 220

Pro Ala Pro Gly Pro Ala Thr Ser Pro Ser Phe Leu Ser Cys Leu Gly
225 230 235 240

Pro Gly Thr Val Gly Thr Gly Leu Gly Gly Thr Ala Glu Asp Pro Gly
245 250 255

Val Ile Ala Glu Thr Ala Pro Ser Lys Arg Gly Arg Arg Ser Trp Ala
260 265 270

Arg Lys Arg Gln Ala Ala His Thr Cys Ala His Pro Gly Cys Gly Lys
275 280 285

Ser Tyr Thr Lys Ser Ser His Leu Lys Ala His Leu Arg Thr His Thr
290 295 300

Gly Glu Lys Pro Tyr Ala Cys Thr Trp Glu Gly Cys Gly Trp Arg Phe
305 310 315 320

Ala Arg Ser Asp Glu Leu Thr Arg His Tyr Arg Lys His Thr Gly Gln
325 330 335

Arg Pro Phe Arg Cys Gln Leu Cys Pro Arg Ala Phe Ser Arg Ser Asp
340 345 350

His Leu Ala Leu His Met Lys Arg His Leu
355 360

<210> 2467

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2467

Met Gly Cys Gly Cys Ser Ser His Pro Glu Asp Asp Trp Met Glu Asn
 1 5 10 15

Ile Asp Val Cys Glu Asn Cys His Tyr Pro Ile Val Pro Leu Asp Gly
 20 25 30

Lys Gly Thr Leu Leu Ile Arg Asn Gly Ser Glu Val Arg Asp Pro Leu
 35 40 45

Val Thr Tyr Glu Gly Ser Asn Pro Pro Ala Ser Pro Leu Gln Asp Asn
 50 55 60

Leu Val Ile Ala Leu His Ser Tyr Glu Pro Ser His Asp Gly Asp Leu
 65 70 75 80

Gly Phe Glu Lys Gly Glu Pro Leu Arg Ile Leu Glu Gln Ser Gly Glu
 85 90 95

Trp Trp Lys Ala Gln Ser Leu Thr Thr Gly Gln Glu Gly Phe Ile Pro
 100 105 110

Phe Asn Phe Val Ala Lys Ala Asn Ser Leu Glu Pro Glu Pro Trp Phe
 115 120 125

Phe Lys Asn Leu Ser Arg Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro
 130 135 140

Gly Asn Thr His Gly Ser Phe Leu Ile Arg Glu Ser Glu Ser Thr Ala
 145 150 155 160

Gly Ser Phe Ser Leu Ser Val Arg Asp Phe Asp Gln Asn Gln Gly Glu
 165 170 175

Val Val Lys His Tyr Lys Ile Arg Asn Leu Asp Asn Gly Gly Phe Tyr
 180 185 190

Ile Ser Pro Arg Ile Thr Phe Pro Gly Leu His Glu Leu Val Arg His
 195 200 205

Tyr Thr Asn Ala Ser Asp Gly Leu Cys Thr Arg Leu Ser Arg Pro Cys
 210 215 220

Gln Thr Gln Lys Pro Gln Lys Pro Trp Trp Glu Asp Glu Trp Glu Val
 225 230 235 240

Pro	Arg	Glu	Thr	Leu	Lys	Leu	Val	Glu	Arg	Leu	Gly	Ala	Gly	Gln	Phe
				245						250					255
Gly	Glu	Val	Trp	Met	Gly	Tyr	Tyr	Asn	Gly	His	Thr	Lys	Val	Ala	Val
			260					265					270		
Lys	Ser	Leu	Lys	Gln	Gly	Ser	Met	Ser	Pro	Asp	Ala	Phe	Leu	Ala	Glu
		275					280					285			
Ala	Asn	Leu	Met	Lys	Gln	Leu	Gln	His	Gln	Arg	Leu	Val	Arg	Leu	Tyr
	290					295					300				
Ala	Val	Val	Thr	Gln	Glu	Pro	Ile	Tyr	Ile	Ile	Thr	Glu	Tyr	Met	Glu
305					310					315					320
Asn	Gly	Ser	Leu	Val	Asp	Phe	Leu	Lys	Thr	Pro	Ser	Gly	Ile	Lys	Leu
			325					330						335	
Thr	Ile	Asn	Lys	Leu	Leu	Asp	Met	Ala	Ala	Gln	Ile	Ala	Glu	Gly	Met
			340					345					350		
Ala	Phe	Ile	Glu	Glu	Arg	Asn	Tyr	Ile	His	Arg	Asp	Leu	Arg	Ala	Ala
		355					360					365			
Asn	Ile	Leu	Val	Ser	Asp	Thr	Leu	Ser	Cys	Lys	Ile	Ala	Asp	Phe	Gly
	370					375					380				
Leu	Ala	Arg	Leu	Ile	Glu	Asp	Asn	Glu	Tyr	Thr	Ala	Arg	Glu	Gly	Ala
385					390					395					400
Lys	Phe	Pro	Ile	Lys	Trp	Thr	Ala	Pro	Glu	Ala	Ile	Asn	Tyr	Gly	Thr
			405						410					415	
Phe	Thr	Ile	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Ile	Leu	Leu	Thr	Glu
			420					425					430		
Ile	Val	Thr	His	Gly	Arg	Ile	Pro	Tyr	Pro	Gly	Met	Thr	Asn	Pro	Glu
		435					440					445			
Val	Ile	Gln	Asn	Leu	Glu	Arg	Gly	Tyr	Arg	Met	Val	Arg	Pro	Asp	Asn
	450					455					460				
Cys	Pro	Glu	Glu	Leu	Tyr	Gln	Leu	Met	Arg	Leu	Cys	Trp	Lys	Glu	Arg
465					470					475					480

Pro Glu Asp Arg Pro Thr Phe Asp Tyr Leu Arg Ser Val Leu Glu Asp
 485 490 495

Phe Phe Thr Ala Thr Glu Gly Gln Tyr Gln Pro Gln Pro
 500 505

<210> 2468

<211> 399

<212> PRT

<213> Homo sapiens

<400> 2468

Met Pro Gln Leu Ser Gly Gly Gly Gly Gly Gly Gly Asp Pro Glu
 1 5 10 15

Leu Cys Ala Thr Asp Glu Met Ile Pro Phe Lys Asp Glu Gly Asp Pro
 20 25 30

Gln Lys Glu Lys Ile Phe Ala Glu Ile Ser His Pro Glu Glu Glu Gly
 35 40 45

Asp Leu Ala Asp Ile Lys Ser Ser Leu Val Asn Glu Ser Glu Ile Ile
 50 55 60

Pro Ala Ser Asn Gly His Glu Val Ala Arg Gln Ala Gln Thr Ser Gln
 65 70 75 80

Glu Pro Tyr His Asp Lys Ala Arg Glu His Pro Asp Asp Gly Lys His
 85 90 95

Pro Asp Gly Gly Leu Tyr Asn Lys Gly Pro Ser Tyr Ser Ser Tyr Ser
 100 105 110

Gly Tyr Ile Met Met Pro Asn Met Asn Asn Asp Pro Tyr Met Ser Asn
 115 120 125

Gly Ser Leu Ser Pro Pro Ile Pro Arg Thr Ser Asn Lys Val Pro Val
 130 135 140

Val Gln Pro Ser His Ala Val His Pro Leu Thr Pro Leu Ile Thr Tyr
 145 150 155 160

Ser Asp Glu His Phe Ser Pro Gly Ser His Pro Ser His Ile Pro Ser
 165 170 175

Asp Val Asn Ser Lys Gln Gly Met Ser Arg His Pro Pro Ala Pro Asp

180	185	190
Ile Pro Thr Phe Tyr Pro Leu Ser Pro Gly Gly Val Gly Gln Ile Thr 195 200 205		
Pro Pro Leu Gly Trp Gln Gly Gln Pro Val Tyr Pro Ile Thr Gly Gly 210 215 220		
Phe Arg Gln Pro Tyr Pro Ser Ser Leu Ser Val Asp Thr Ser Met Ser 225 230 235 240		
Arg Phe Ser His His Met Ile Pro Gly Pro Pro Gly Pro His Thr Thr 245 250 255		
Gly Ile Pro His Pro Ala Ile Val Thr Pro Gln Val Lys Gln Glu His 260 265 270		
Pro His Thr Asp Ser Asp Leu Met His Val Lys Pro Gln His Glu Gln 275 280 285		
Arg Lys Glu Gln Glu Pro Lys Arg Pro His Ile Lys Lys Pro Leu Asn 290 295 300		
Ala Phe Met Leu Tyr Met Lys Glu Met Arg Ala Asn Val Val Ala Glu 305 310 315 320		
Cys Thr Leu Lys Glu Ser Ala Ala Ile Asn Gln Ile Leu Gly Arg Arg 325 330 335		
Trp His Ala Leu Ser Arg Glu Glu Gln Ala Lys Tyr Tyr Glu Leu Ala 340 345 350		
Arg Lys Glu Arg Gln Leu His Met Gln Leu Tyr Pro Gly Trp Ser Ala 355 360 365		
Arg Asp Asn Tyr Gly Lys Lys Lys Lys Arg Lys Arg Glu Lys Leu Gln 370 375 380		
Glu Ser Ala Ser Gly Thr Gly Pro Arg Met Thr Ala Ala Tyr Ile 385 390 395		
<210> 2469		
<211> 335		
<212> PRT		
<213> Homo sapiens		
<400> 2469		

Met Gly His Pro Pro Leu Leu Pro Leu Leu Leu Leu His Thr Cys
 1 5 10 15

Val Pro Ala Ser Trp Gly Leu Arg Cys Met Gln Cys Lys Thr Asn Gly
 20 25 30

Asp Cys Arg Val Glu Glu Cys Ala Leu Gly Gln Asp Leu Cys Arg Thr
 35 40 45

Thr Ile Val Arg Leu Trp Glu Glu Gly Glu Glu Leu Glu Leu Val Glu
 50 55 60

Lys Ser Cys Thr His Ser Glu Lys Thr Asn Arg Thr Leu Ser Tyr Arg
 65 70 75 80

Thr Gly Leu Lys Ile Thr Ser Leu Thr Glu Val Val Cys Gly Leu Asp
 85 90 95

Leu Cys Asn Gln Gly Asn Ser Gly Arg Ala Val Thr Tyr Ser Arg Ser
 100 105 110

Arg Tyr Leu Glu Cys Ile Ser Cys Gly Ser Ser Asp Met Ser Cys Glu
 115 120 125

Arg Gly Arg His Gln Ser Leu Gln Cys Arg Ser Pro Glu Glu Gln Cys
 130 135 140

Leu Asp Val Val Thr His Trp Ile Gln Glu Gly Glu Glu Gly Arg Pro
 145 150 155 160

Lys Asp Asp Arg His Leu Arg Gly Cys Gly Tyr Leu Pro Gly Cys Pro
 165 170 175

Gly Ser Asn Gly Phe His Asn Asn Asp Thr Phe His Phe Leu Lys Cys
 180 185 190

Cys Asn Thr Thr Lys Cys Asn Glu Gly Pro Ile Leu Glu Leu Glu Asn
 195 200 205

Leu Pro Gln Asn Gly Arg Gln Cys Tyr Ser Cys Lys Gly Asn Ser Thr
 210 215 220

His Gly Cys Ser Ser Glu Glu Thr Phe Leu Ile Asp Cys Arg Gly Pro
 225 230 235 240

Met Asn Gln Cys Leu Val Ala Thr Gly Thr His Glu Pro Lys Asn Gln
 245 250 255

Ser Tyr Met Val Arg Gly Cys Ala Thr Ala Ser Met Cys Gln His Ala
 260 265 270

His Leu Gly Asp Ala Phe Ser Met Asn His Ile Asp Val Ser Cys Cys
 275 280 285

Thr Lys Ser Gly Cys Asn His Pro Asp Leu Asp Val Gln Tyr Arg Ser
 290 295 300

Gly Ala Ala Pro Gln Pro Gly Pro Ala His Leu Ser Leu Thr Ile Thr
 305 310 315 320

Leu Leu Met Thr Ala Arg Leu Trp Gly Gly Thr Leu Leu Trp Thr
 325 330 335

<210> 2470

<211> 285

<212> PRT

<213> Homo sapiens

<400> 2470

Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
 1 5 10 15

Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
 20 25 30

Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
 35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
 50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
 65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
 85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
 100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
 115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
 130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
 145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
 165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
 180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
 195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
 210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
 225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
 245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
 260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
 275 280 285

<210> 2471

<211> 99

<212> PRT

<213> Homo sapiens

<400> 2471

Met Thr Ser Lys Leu Ala Val Ala Leu Leu Ala Ala Phe Leu Ile Ser
 1 5 10 15

Ala Ala Leu Cys Glu Gly Ala Val Leu Pro Arg Ser Ala Lys Glu Leu
 20 25 30

Arg Cys Gln Cys Ile Lys Thr Tyr Ser Lys Pro Phe His Pro Lys Phe
 35 40 45

Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr
 50 55 60

Glu Ile Ile Val Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro
 65 70 75 80

Lys Glu Asn Trp Val Gln Arg Val Val Glu Lys Phe Leu Lys Arg Ala
 85 90 95

Glu Asn Ser

<210> 2472

<211> 247

<212> PRT

<213> Homo sapiens

<400> 2472

Met Gln Pro Ile Leu Leu Leu Ala Phe Leu Leu Leu Pro Arg Ala
 1 5 10 15

Asp Ala Gly Glu Ile Ile Gly Gly His Glu Ala Lys Pro His Ser Arg
 20 25 30

Pro Tyr Met Ala Tyr Leu Met Ile Trp Asp Gln Lys Ser Leu Lys Arg
 35 40 45

Cys Gly Gly Phe Leu Ile Gln Asp Asp Phe Val Leu Thr Ala Ala His
 50 55 60

Cys Trp Gly Ser Ser Ile Asn Val Thr Leu Gly Ala His Asn Ile Lys
 65 70 75 80

Glu Gln Glu Pro Thr Gln Gln Phe Ile Pro Val Lys Arg Pro Ile Pro
 85 90 95

His Pro Ala Tyr Asn Pro Lys Asn Phe Ser Asn Asp Ile Met Leu Leu
 100 105 110

Gln Leu Glu Arg Lys Ala Lys Arg Thr Arg Ala Val Gln Pro Leu Arg
 115 120 125

Leu Pro Ser Asn Lys Ala Gln Val Lys Pro Gly Gln Thr Cys Ser Val
 130 135 140

Ala Gly Trp Gly Gln Thr Ala Pro Leu Gly Lys His Ser His Thr Leu
 145 150 155 160

Gln Glu Val Lys Met Thr Val Gln Glu Asp Arg Lys Cys Glu Ser Asp
 165 170 175

Leu Arg His Tyr Tyr Asp Ser Thr Ile Glu Leu Cys Val Gly Asp Pro
 180 185 190

Glu Ile Lys Lys Thr Ser Phe Lys Gly Asp Ser Gly Gly Pro Leu Val
 195 200 205

Cys Asn Lys Val Ala Gln Gly Ile Val Ser Tyr Gly Arg Asn Asn Gly
 210 215 220

Met Pro Pro Arg Ala Cys Thr Lys Val Ser Ser Phe Val His Trp Ile
 225 230 235 240

Lys Lys Thr Met Lys Arg Tyr
 245

<210> 2473

<211> 281

<212> PRT

<213> Homo sapiens

<400> 2473

Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val Asp
 1 5 10 15

Ser Ser Ala Ser Ser Pro Trp Ala Pro Gly Thr Val Leu Pro Cys
 20 25 30

Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro Pro Pro Pro
 35 40 45

Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Leu Pro
 50 55 60

Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly Asn His Ser Thr Gly
 65 70 75 80

Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly
 85 90 95

Leu Gly Leu Gly Met Phe Gln Leu Phe His Leu Gln Lys Glu Leu Ala
 100 105 110

Glu Leu Arg Glu Ser Thr Ser Gln Met His Thr Ala Ser Ser Leu Glu
 115 120 125

Lys Gln Ile Gly His Pro Ser Pro Pro Pro Glu Lys Lys Glu Leu Arg
 130 135 140

Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser Met Pro Leu
 145 150 155 160

Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly Val Lys Tyr
 165 170 175

Lys Lys Gly Gly Leu Val Ile Asn Glu Thr Gly Leu Tyr Phe Val Tyr
 180 185 190

Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu Pro Leu Ser
 195 200 205

His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Asp Leu Val Met
 210 215 220

Met Glu Gly Lys Met Met Ser Tyr Cys Thr Thr Gly Gln Met Trp Ala
 225 230 235 240

Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala Asp His
 245 250 255

Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu Glu Ser
 260 265 270

Gln Thr Phe Phe Gly Leu Tyr Lys Leu
 275 280

<210> 2474

<211> 830

<212> PRT

<213> Homo sapiens

<400> 2474

Met Gly Ser Met Phe Arg Ser Glu Glu Val Ala Leu Val Gln Leu Phe
 1 5 10 15

Leu Pro Thr Ala Ala Ala Tyr Thr Cys Val Ser Arg Leu Gly Glu Leu
 20 25 30

Gly Leu Val Glu Phe Arg Asp Leu Asn Ala Ser Val Ser Ala Phe Gln
 35 40 45

Arg Arg Phe Val Val Asp Val Arg Arg Cys Glu Glu Leu Glu Lys Thr
 50 55 60

Phe Thr Phe Leu Gln Glu Glu Val Arg Arg Ala Gly Leu Val Leu Pro
 65 70 75 80

Pro Pro Lys Gly Arg Leu Pro Ala Pro Pro Pro Arg Asp Leu Leu Arg
 85 90 95

Ile Gln Glu Glu Thr Glu Arg Leu Ala Gln Glu Leu Arg Asp Val Arg
 100 105 110

Gly Asn Gln Gln Ala Leu Arg Ala Gln Leu His Gln Leu Gln Leu His
 115 120 125

Ala Ala Val Leu Arg Gln Gly His Glu Pro Gln Leu Ala Ala Ala His
 130 135 140

Thr Asp Gly Ala Ser Glu Arg Thr Pro Leu Leu Gln Ala Pro Gly Gly
 145 150 155 160

Pro His Gln Asp Leu Arg Val Asn Phe Val Ala Gly Ala Val Glu Pro
 165 170 175

His Lys Ala Pro Ala Leu Glu Arg Leu Leu Trp Arg Ala Cys Arg Gly
 180 185 190

Phe Leu Ile Ala Ser Phe Arg Glu Leu Glu Gln Pro Leu Glu His Pro
 195 200 205

Val Thr Gly Glu Pro Ala Thr Trp Met Thr Phe Leu Ile Ser Tyr Trp
 210 215 220

Gly Glu Gln Ile Gly Gln Lys Ile Arg Lys Ile Thr Asp Cys Phe His
 225 230 235 240

Cys His Val Phe Pro Phe Leu Gln Gln Glu Glu Ala Arg Leu Gly Ala
 245 250 255

Leu Gln Gln Leu Gln Gln Gln Ser Gln Glu Leu Gln Glu Val Leu Gly
 260 265 270

Glu Thr Glu Arg Phe Leu Ser Gln Val Leu Gly Arg Val Leu Gln Leu
 275 280 285

Leu Pro Pro Gly Gln Val Gln Val His Lys Met Lys Ala Val Tyr Leu
290 295 300

Ala Leu Asn Gln Cys Ser Val Ser Thr Thr His Lys Cys Leu Ile Ala
305 310 315 320

Glu Ala Trp Cys Ser Val Arg Asp Leu Pro Ala Leu Gln Glu Ala Leu
325 330 335

Arg Asp Ser Ser Met Glu Glu Gly Val Ser Ala Val Ala His Arg Ile
340 345 350

Pro Cys Arg Asp Met Pro Pro Thr Leu Ile Arg Thr Asn Arg Phe Thr
355 360 365

Ala Ser Phe Gln Gly Ile Val Asp Ala Tyr Gly Val Gly Arg Tyr Gln
370 375 380

Glu Val Asn Pro Ala Pro Tyr Thr Ile Ile Thr Phe Pro Phe Leu Phe
385 390 395 400

Ala Val Met Phe Gly Asp Val Gly His Gly Leu Leu Met Phe Leu Phe
405 410 415

Ala Leu Ala Met Val Leu Ala Glu Asn Arg Pro Ala Val Lys Ala Ala
420 425 430

Gln Asn Glu Ile Trp Gln Thr Phe Phe Arg Gly Arg Tyr Leu Leu Leu
435 440 445

Leu Met Gly Leu Phe Ser Ile Tyr Thr Gly Phe Ile Tyr Asn Glu Cys
450 455 460

Phe Ser Arg Ala Thr Ser Ile Phe Pro Ser Gly Trp Ser Val Ala Ala
465 470 475 480

Met Ala Asn Gln Ser Gly Trp Ser Asp Ala Phe Leu Ala Gln His Thr
485 490 495

Met Leu Thr Leu Asp Pro Asn Val Thr Gly Val Phe Leu Gly Pro Tyr
500 505 510

Pro Phe Gly Ile Asp Pro Ile Trp Ser Leu Ala Ala Asn His Leu Ser
515 520 525

Phe Leu Asn Ser Phe Lys Met Lys Met Ser Val Ile Leu Gly Val Val
 530 535 540

His Met Ala Phe Gly Val Val Leu Gly Val Phe Asn His Val His Phe
 545 550 555 560

Gly Gln Arg His Arg Leu Leu Leu Glu Thr Leu Pro Glu Leu Thr Phe
 565 570 575

Leu Leu Gly Leu Phe Gly Tyr Leu Val Phe Leu Val Ile Tyr Lys Trp
 580 585 590

Leu Cys Val Trp Ala Ala Arg Ala Ala Ser Ala Pro Ser Ile Leu Ile
 595 600 605

His Phe Ile Asn Met Phe Leu Phe Ser His Ser Pro Ser Asn Arg Leu
 610 615 620

Leu Tyr Pro Arg Gln Glu Val Val Gln Ala Thr Leu Val Val Leu Ala
 625 630 635 640

Leu Ala Met Val Pro Ile Leu Leu Leu Gly Thr Pro Leu His Leu Leu
 645 650 655

His Arg His Arg Arg Arg Leu Arg Arg Arg Pro Ala Asp Arg Gln Glu
 660 665 670

Glu Asn Lys Ala Gly Leu Leu Asp Leu Pro Asp Ala Ser Val Asn Gly
 675 680 685

Trp Ser Ser Asp Glu Glu Lys Ala Gly Gly Leu Asp Asp Glu Glu Glu
 690 695 700

Ala Glu Leu Val Pro Ser Glu Val Leu Met His Gln Ala Ile His Thr
 705 710 715 720

Ile Glu Phe Cys Leu Gly Cys Val Ser Asn Thr Ala Ser Tyr Leu Arg
 725 730 735

Leu Trp Ala Leu Ser Leu Ala His Ala Gln Leu Ser Glu Val Leu Trp
 740 745 750

Ala Met Val Met Arg Ile Gly Leu Gly Leu Gly Arg Glu Val Gly Val
 755 760 765

Ala Ala Val Val Leu Val Pro Ile Phe Ala Ala Phe Ala Val Met Thr

770

775

780

Val Ala Ile Leu Leu Val Met Glu Gly Leu Ser Ala Phe Leu His Ala
 785 790 795 800

Leu Arg Leu His Trp Val Glu Phe Gln Asn Lys Phe Tyr Ser Gly Thr
 805 810 815

Gly Tyr Lys Leu Ser Pro Phe Thr Phe Ala Ala Thr Asp Asp
 820 825 830

<210> 2475

<211> 555

<212> PRT

<213> Homo sapiens

<400> 2475

Met Ala Ala Arg Leu Leu Leu Leu Gly Ile Leu Leu Leu Leu Pro
 1 5 10 15

Leu Pro Val Pro Ala Pro Cys His Thr Ala Ala Arg Ser Glu Cys Lys
 20 25 30

Arg Ser His Lys Phe Val Pro Gly Ala Trp Leu Ala Gly Glu Gly Val
 35 40 45

Asp Val Thr Ser Leu Arg Arg Ser Gly Ser Phe Pro Val Asp Thr Gln
 50 55 60

Arg Phe Leu Arg Pro Asp Gly Thr Cys Thr Leu Cys Glu Asn Ala Leu
 65 70 75 80

Gln Glu Gly Thr Leu Gln Arg Leu Pro Leu Ala Leu Thr Asn Trp Arg
 85 90 95

Ala Gln Gly Ser Gly Cys Gln Arg His Val Thr Arg Ala Lys Val Ser
 100 105 110

Ser Thr Glu Ala Val Ala Arg Asp Ala Ala Arg Ser Ile Arg Asn Asp
 115 120 125

Trp Lys Val Gly Leu Asp Val Thr Pro Lys Pro Thr Ser Asn Val His
 130 135 140

Val Ser Val Ala Gly Ser His Ser Gln Ala Ala Asn Phe Ala Ala Gln
 145 150 155 160

Lys Thr His Gln Asp Gln Tyr Ser Phe Ser Thr Asp Thr Val Glu Cys
 165 170 175

Arg Phe Tyr Ser Phe His Val Val His Thr Pro Pro Leu His Pro Asp
 180 185 190

Phe Lys Arg Ala Leu Gly Asp Leu Pro His His Phe Asn Ala Ser Thr
 195 200 205

Gln Pro Ala Tyr Leu Arg Leu Ile Ser Asn Tyr Gly Thr His Phe Ile
 210 215 220

Arg Ala Val Glu Leu Gly Gly Arg Ile Ser Ala Leu Thr Ala Leu Arg
 225 230 235 240

Thr Cys Glu Leu Ala Leu Glu Gly Leu Thr Asp Asn Glu Val Glu Asp
 245 250 255

Cys Leu Thr Val Glu Ala Gln Val Asn Ile Gly Ile His Gly Ser Ile
 260 265 270

Ser Ala Glu Ala Lys Ala Cys Glu Glu Lys Lys Lys Lys His Lys Met
 275 280 285

Thr Ala Ser Phe His Gln Thr Tyr Arg Glu Arg His Ser Glu Val Val
 290 295 300

Gly Gly His His Thr Ser Ile Asn Asp Leu Leu Phe Gly Ile Gln Ala
 305 310 315 320

Gly Pro Glu Gln Tyr Ser Ala Trp Val Asn Ser Val Pro Gly Ser Pro
 325 330 335

Gly Leu Val Asp Tyr Thr Leu Glu Pro Leu His Val Leu Leu Asp Ser
 340 345 350

Gln Asp Pro Arg Arg Glu Ala Leu Arg Arg Ala Leu Ser Gln Tyr Leu
 355 360 365

Thr Asp Arg Ala Arg Trp Arg Asp Cys Ser Arg Pro Cys Pro Pro Gly
 370 375 380

Arg Gln Lys Ser Pro Arg Asp Pro Cys Gln Cys Val Cys His Gly Ser
 385 390 395 400

Ala Val Thr Thr Gln Asp Cys Cys Pro Arg Gln Arg Gly Leu Ala Gln
 405 410 415

Leu Glu Val Thr Phe Ile Gln Ala Trp Ser Leu Trp Gly Asp Trp Phe
 420 425 430

Thr Ala Thr Asp Ala Tyr Val Lys Leu Phe Phe Gly Gly Gln Glu Leu
 435 440 445

Arg Thr Ser Thr Val Trp Asp Asn Asn Asn Pro Ile Trp Ser Val Arg
 450 455 460

Leu Asp Phe Gly Asp Val Leu Leu Ala Thr Gly Gly Pro Leu Arg Leu
 465 470 475 480

Gln Val Trp Asp Gln Asp Ser Gly Arg Asp Asp Asp Leu Leu Gly Thr
 485 490 495

Cys Asp Gln Ala Pro Lys Ser Gly Ser His Glu Val Arg Cys Asn Leu
 500 505 510

Asn His Gly His Leu Lys Phe Arg Tyr His Ala Arg Cys Leu Pro His
 515 520 525

Leu Gly Gly Gly Thr Cys Leu Asp Tyr Val Pro Gln Met Leu Leu Gly
 530 535 540

Glu Pro Pro Gly Asn Arg Ser Gly Ala Val Trp
 545 550 555

<210> 2476

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2476

Met Gly Leu Thr Ser Gln Leu Leu Pro Pro Leu Phe Phe Leu Leu Ala
 1 5 10 15

Cys Ala Gly Asn Phe Val His Gly His Lys Cys Asp Ile Thr Leu Gln
 20 25 30

Glu Ile Ile Lys Thr Leu Asn Ser Leu Thr Glu Gln Lys Thr Leu Cys
 35 40 45

Thr Glu Leu Thr Val Thr Asp Ile Phe Ala Ala Ser Lys Asn Thr Thr
 50 55 60

Glu Lys Glu Thr Phe Cys Arg Ala Ala Thr Val Leu Arg Gln Phe Tyr
 65 70 75 80

Ser His His Glu Lys Asp Thr Arg Cys Leu Gly Ala Thr Ala Gln Gln
 85 90 95

Phe His Arg His Lys Gln Leu Ile Arg Phe Leu Lys Arg Leu Asp Arg
 100 105 110

Asn Leu Trp Gly Leu Ala Gly Leu Asn Ser Cys Pro Val Lys Glu Ala
 115 120 125

Asn Gln Ser Thr Leu Glu Asn Phe Leu Glu Arg Leu Lys Thr Ile Met
 130 135 140

Arg Glu Lys Tyr Ser Lys Cys Ser Ser
 145 150

<210> 2477

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2477

Met His Pro Leu Leu Asn Pro Leu Leu Leu Ala Leu Gly Leu Met Ala
 1 5 10 15

Leu Leu Leu Thr Thr Val Ile Ala Leu Thr Cys Leu Gly Gly Phe Ala
 20 25 30

Ser Pro Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu
 35 40 45

Glu Leu Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly
 50 55 60

Ser Met Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala
 65 70 75 80

Leu Glu Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr
 85 90 95

Gln Arg Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln
 100 105 110

Phe Ser Ser Leu His Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe
 115 120 125

Val Lys Asp Leu Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Gln
 130 135 140

Phe Asn
 145

<210> 2478
 <211> 223
 <212> PRT
 <213> Homo sapiens
 <400> 2478

Met Ala Cys Leu Gly Phe Gln Arg His Lys Ala Gln Leu Asn Leu Ala
 1 5 10 15

Thr Arg Thr Trp Pro Cys Thr Leu Leu Phe Phe Leu Leu Phe Ile Pro
 20 25 30

Val Phe Cys Lys Ala Met His Val Ala Gln Pro Ala Val Val Leu Ala
 35 40 45

Ser Ser Arg Gly Ile Ala Ser Phe Val Cys Glu Tyr Ala Ser Pro Gly
 50 55 60

Lys Ala Thr Glu Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln
 65 70 75 80

Val Thr Glu Val Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr
 85 90 95

Phe Leu Asp Asp Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val
 100 105 110

Asn Leu Thr Ile Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile
 115 120 125

Cys Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly
 130 135 140

Asn Gly Thr Gln Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser
 145 150 155 160

Asp Phe Leu Leu Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe
 165 170 175

Tyr Ser Phe Leu Leu Thr Ala Val Ser Leu Ser Lys Met Leu Lys Lys
 180 185 190

Arg Ser Pro Leu Thr Thr Gly Val Tyr Val Lys Met Pro Pro Thr Glu
 195 200 205

Pro Glu Cys Glu Lys Gln Phe Gln Pro Tyr Phe Ile Pro Ile Asn
 210 215 220

<210> 2479

<211> 235

<212> PRT

<213> Homo sapiens

<400> 2479

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr
 20 25 30

Trp Asn Leu Gly Glu Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser
 35 40 45

Asn Pro Thr Ser Gly Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala
 50 55 60

Ala Ser Pro Thr Phe Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala
 65 70 75 80

Ala Glu Gly Leu Asp Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp
 85 90 95

Thr Phe Val Leu Thr Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr
 100 105 110

Tyr Phe Cys Ser Ala Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe
 115 120 125

Val Pro Val Phe Leu Pro Ala Lys Pro Thr Thr Thr Pro Ala Pro Arg
 130 135 140

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
 145 150 155 160

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
165 170 175

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
180 185 190

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Asn His
195 200 205

Arg Asn Arg Arg Arg Val Cys Lys Cys Pro Arg Pro Val Val Lys Ser
210 215 220

Gly Asp Lys Pro Ser Leu Ser Ala Arg Tyr Val
225 230 235

<210> 2480

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2480

Met Leu Leu Glu Pro Gly Arg Gly Cys Cys Ala Leu Ala Ile Leu Leu
1 5 10 15

Ala Ile Val Asp Ile Gln Ser Gly Gly Cys Ile Asn Ile Thr Ser Ser
20 25 30

Ala Ser Gln Glu Gly Thr Arg Leu Asn Leu Ile Cys Thr Val Trp His
35 40 45

Lys Lys Glu Glu Ala Glu Gly Phe Val Val Phe Leu Cys Lys Asp Arg
50 55 60

Ser Gly Asp Cys Ser Pro Glu Thr Ser Leu Lys Gln Leu Arg Leu Lys
65 70 75 80

Arg Asp Pro Gly Ile Asp Gly Val Gly Glu Ile Ser Ser Gln Leu Met
85 90 95

Phe Thr Ile Ser Gln Val Thr Pro Leu His Ser Gly Thr Tyr Gln Cys
100 105 110

Cys Ala Arg Ser Gln Lys Ser Gly Ile Arg Leu Gln Gly His Phe Phe
115 120 125

Ser Ile Leu Phe Thr Glu Thr Gly Asn Tyr Thr Val Thr Gly Leu Lys
130 135 140

Gln Arg Gln His Leu Glu Phe Ser His Asn Glu Gly Thr Leu Ser Ser
 145 150 155 160

Gly Phe Leu Gln Glu Lys Val Trp Val Met Leu Val Thr Ser Leu Val
 165 170 175

Ala Leu Gln Ala Leu
 180

<210> 2481

<211> 147

<212> PRT

<213> Homo sapiens

<400> 2481

Met Val His Leu Thr Pro Glu Glu Lys Ser Ala Val Thr Ala Leu Trp
 1 5 10 15

Gly Lys Val Asn Val Asp Glu Val Gly Gly Glu Ala Leu Gly Arg Leu
 20 25 30

Leu Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Glu Ser Phe Gly Asp
 35 40 45

Leu Ser Thr Pro Asp Ala Val Met Gly Asn Pro Lys Val Lys Ala His
 50 55 60

Gly Lys Lys Val Leu Gly Ala Phe Ser Asp Gly Leu Ala His Leu Asp
 65 70 75 80

Asn Leu Lys Gly Thr Phe Ala Thr Leu Ser Glu Leu His Cys Asp Lys
 85 90 95

Leu His Val Asp Pro Glu Asn Phe Arg Leu Leu Gly Asn Val Leu Val
 100 105 110

Cys Val Leu Ala His His Phe Gly Lys Glu Phe Thr Pro Pro Val Gln
 115 120 125

Ala Ala Tyr Gln Lys Val Val Ala Gly Val Ala Asn Ala Leu Ala His
 130 135 140

Lys Tyr His
 145

<210> 2482
 <211> 259
 <212> PRT
 <213> Homo sapiens

<400> 2482

Met Ser Lys Tyr Lys Leu Ile Met Leu Arg His Gly Glu Gly Ala Trp
 1 5 10 15

Asn Lys Glu Asn Arg Phe Cys Ser Trp Val Asp Gln Lys Leu Asn Ser
 20 25 30

Glu Gly Met Glu Glu Ala Arg Asn Cys Gly Lys Gln Leu Lys Ala Leu
 35 40 45

Asn Phe Glu Phe Asp Leu Val Phe Thr Ser Val Leu Asn Arg Ser Ile
 50 55 60

His Thr Ala Trp Leu Ile Leu Glu Glu Leu Gly Gln Glu Trp Val Pro
 65 70 75 80

Val Glu Ser Ser Trp Arg Leu Asn Glu Arg His Tyr Gly Ala Leu Ile
 85 90 95

Gly Leu Asn Arg Glu Gln Met Ala Leu Asn His Gly Glu Glu Gln Val
 100 105 110

Arg Leu Trp Arg Arg Ser Tyr Asn Val Thr Pro Pro Pro Ile Glu Glu
 115 120 125

Ser His Pro Tyr Tyr Gln Glu Ile Tyr Asn Asp Arg Tyr Lys Val
 130 135 140

Cys Asp Val Pro Leu Asp Gln Leu Pro Arg Ser Glu Ser Leu Lys Asp
 145 150 155 160

Val Leu Glu Arg Leu Leu Pro Tyr Trp Asn Glu Arg Ile Ala Pro Glu
 165 170 175

Val Leu Arg Gly Lys Thr Ile Leu Ile Ser Ala His Gly Asn Ser Ser
 180 185 190

Arg Ala Leu Leu Lys His Leu Glu Gly Ile Ser Asp Glu Asp Ile Ile
 195 200 205

Asn Ile Thr Leu Pro Thr Gly Val Pro Ile Leu Leu Glu Leu Asp Glu
 210 215 220

Asn Leu Arg Ala Val Gly Pro His Gln Phe Leu Gly Asp Gln Glu Ala
 225 230 235 240

Ile Gln Ala Ala Ile Lys Lys Val Glu Asp Gln Gly Lys Val Lys Gln
 245 250 255

Ala Lys Lys

<210> 2483

<211> 344

<212> PRT

<213> Homo sapiens

<400> 2483

Met Ser Ala Leu Ala Ala Arg Leu Leu Gln Pro Ala His Ser Cys Ser
 1 5 10 15

Leu Arg Leu Arg Pro Phe His Leu Ala Ala Val Arg Asn Glu Ala Val
 20 25 30

Val Ile Ser Gly Arg Lys Leu Ala Gln Gln Ile Lys Gln Glu Val Arg
 35 40 45

Gln Glu Val Glu Glu Trp Val Ala Ser Gly Asn Lys Arg Pro His Leu
 50 55 60

Ser Val Ile Leu Val Gly Glu Asn Pro Ala Ser His Ser Tyr Val Leu
 65 70 75 80

Asn Lys Thr Arg Ala Ala Ala Val Val Gly Ile Asn Ser Glu Thr Ile
 85 90 95

Met Lys Pro Ala Ser Ile Ser Glu Glu Glu Leu Leu Asn Leu Ile Asn
 100 105 110

Lys Leu Asn Asn Asp Asp Asn Val Asp Gly Leu Leu Val Gln Leu Pro
 115 120 125

Leu Pro Glu His Ile Asp Glu Arg Arg Ile Cys Asn Ala Val Ser Pro
 130 135 140

Asp Lys Asp Val Asp Gly Phe His Val Ile Asn Val Gly Arg Met Cys
 145 150 155 160

Leu Asp Gln Tyr Ser Met Leu Pro Ala Thr Pro Trp Gly Val Trp Glu
 165 170 175

Ile Ile Lys Arg Thr Gly Ile Pro Thr Leu Gly Lys Asn Val Val Val
 180 185 190

Ala Gly Arg Ser Lys Asn Val Gly Met Pro Ile Ala Met Leu Leu His
 195 200 205

Thr Asp Gly Ala His Glu Arg Pro Gly Gly Asp Ala Thr Val Thr Ile
 210 215 220

Ser His Arg Tyr Thr Pro Lys Glu Gln Leu Lys Lys His Thr Ile Leu
 225 230 235 240

Ala Asp Ile Val Ile Ser Ala Ala Gly Ile Pro Asn Leu Ile Thr Ala
 245 250 255

Asp Met Ile Lys Glu Gly Ala Ala Val Ile Asp Val Gly Ile Asn Arg
 260 265 270

Val His Asp Pro Val Thr Ala Lys Pro Lys Leu Val Gly Asp Val Asp
 275 280 285

Phe Glu Gly Val Arg Gln Lys Ala Gly Tyr Ile Thr Pro Val Pro Gly
 290 295 300

Gly Val Gly Pro Met Thr Val Ala Met Leu Met Lys Asn Thr Ile Ile
 305 310 315 320

Ala Ala Lys Lys Val Leu Arg Leu Glu Glu Arg Glu Val Leu Lys Ser
 325 330 335

Lys Glu Leu Gly Val Ala Thr Asn
 340

<210> 2484

<211> 808

<212> PRT

<213> Homo sapiens

<400> 2484

Met Ala Glu Leu Leu Ala Ser Ala Gly Ser Ala Cys Ser Trp Asp Phe
 1 5 10 15

Pro Arg Ala Pro Pro Ser Phe Pro Pro Pro Ala Ala Ser Arg Gly Gly
 20 25 30

Leu Gly Gly Thr Arg Ser Phe Arg Pro His Arg Gly Ala Glu Ser Pro
 35 40 45

Arg Pro Gly Arg Asp Arg Asp Gly Val Arg Val Pro Met Ala Ser Ser
 50 55 60

Arg Cys Pro Ala Pro Arg Gly Cys Arg Cys Leu Pro Gly Ala Ser Leu
 65 70 75 80

Ala Trp Leu Gly Thr Val Leu Leu Leu Leu Ala Asp Trp Val Leu Leu
 85 90 95

Arg Thr Ala Leu Pro Arg Ile Phe Ser Leu Leu Val Pro Thr Ala Leu
 100 105 110

Pro Leu Leu Arg Val Trp Ala Val Gly Leu Ser Arg Trp Ala Val Leu
 115 120 125

Trp Leu Gly Ala Cys Gly Val Leu Arg Ala Thr Val Gly Ser Lys Ser
 130 135 140

Glu Asn Ala Gly Ala Gln Gly Trp Leu Ala Ala Leu Lys Pro Leu Ala
 145 150 155 160

Ala Ala Leu Gly Leu Ala Leu Pro Gly Leu Ala Leu Phe Arg Glu Leu
 165 170 175

Ile Ser Trp Gly Ala Pro Gly Ser Ala Asp Ser Thr Arg Leu Leu His
 180 185 190

Trp Gly Ser His Pro Thr Ala Phe Val Val Ser Tyr Ala Ala Ala Leu
 195 200 205

Pro Ala Ala Ala Leu Trp His Lys Leu Gly Ser Leu Trp Val Pro Gly
 210 215 220

Gly Gln Gly Gly Ser Gly Asn Pro Val Arg Arg Leu Leu Gly Cys Leu
 225 230 235 240

Gly Ser Glu Thr Arg Arg Leu Ser Leu Phe Leu Val Leu Val Val Leu
 245 250 255

Ser Ser Leu Gly Glu Met Ala Ile Pro Phe Phe Thr Gly Arg Leu Thr
 260 265 270

Asp Trp Ile Leu Gln Asp Gly Ser Ala Asp Thr Phe Thr Arg Asn Leu
 275 280 285

Thr Leu Met Ser Ile Leu Thr Ile Ala Ser Ala Val Leu Glu Phe Val
 290 295 300

Gly Asp Gly Ile Tyr Asn Asn Thr Met Gly His Val His Ser His Leu
 305 310 315 320

Gln Gly Glu Val Phe Gly Ala Val Leu Arg Gln Glu Thr Glu Phe Phe
 325 330 335

Gln Gln Asn Gln Thr Gly Asn Ile Met Ser Arg Val Thr Glu Asp Thr
 340 345 350

Ser Thr Leu Ser Asp Ser Leu Ser Glu Asn Leu Ser Leu Phe Leu Trp
 355 360 365

Tyr Leu Val Arg Gly Leu Cys Leu Leu Gly Ile Met Leu Trp Gly Ser
 370 375 380

Val Ser Leu Thr Met Val Thr Leu Ile Thr Leu Pro Leu Leu Phe Leu
 385 390 395 400

Leu Pro Lys Lys Val Gly Lys Trp Tyr Gln Leu Leu Glu Val Gln Val
 405 410 415

Arg Glu Ser Leu Ala Lys Ser Ser Gln Val Ala Ile Glu Ala Leu Ser
 420 425 430

Ala Met Pro Thr Val Arg Ser Phe Ala Asn Glu Glu Gly Glu Ala Gln
 435 440 445

Lys Phe Arg Glu Lys Leu Gln Glu Ile Lys Thr Leu Asn Gln Lys Glu
 450 455 460

Ala Val Ala Tyr Ala Val Asn Ser Trp Thr Thr Ser Ile Ser Gly Met
 465 470 475 480

Leu Leu Lys Val Gly Ile Leu Tyr Ile Gly Gly Gln Leu Val Thr Ser
 485 490 495

Gly Ala Val Ser Ser Gly Asn Leu Val Thr Phe Val Leu Tyr Gln Met
 500 505 510

Gln Phe Thr Gln Ala Val Glu Val Leu Leu Ser Ile Tyr Pro Arg Val
 515 520 525

Gln Lys Ala Val Gly Ser Ser Glu Lys Ile Phe Glu Tyr Leu Asp Arg
 530 535 540

Thr Pro Arg Cys Pro Pro Ser Gly Leu Leu Thr Pro Leu His Leu Glu
 545 550 555 560

Gly Leu Val Gln Phe Gln Asp Val Ser Phe Ala Tyr Pro Asn Arg Pro
 565 570 575

Asp Val Leu Val Leu Gln Gly Leu Thr Phe Thr Leu Arg Pro Gly Glu
 580 585 590

Val Thr Ala Leu Val Gly Pro Asn Gly Ser Gly Lys Ser Thr Val Ala
 595 600 605

Ala Leu Leu Gln Asn Leu Tyr Gln Pro Thr Gly Gly Gln Leu Leu Leu
 610 615 620

Asp Gly Lys Pro Leu Pro Gln Tyr Glu His Arg Tyr Leu His Arg Gln
 625 630 635 640

Val Ala Ala Val Gly Gln Glu Pro Gln Val Phe Gly Arg Ser Leu Gln
 645 650 655

Glu Asn Ile Ala Tyr Gly Leu Thr Gln Lys Pro Thr Met Glu Glu Ile
 660 665 670

Thr Ala Ala Ala Val Lys Ser Gly Ala His Ser Phe Ile Ser Gly Leu
 675 680 685

Pro Gln Gly Tyr Asp Thr Glu Val Asp Glu Ala Gly Ser Gln Leu Ser
 690 695 700

Gly Gly Gln Arg Gln Ala Val Ala Leu Ala Arg Ala Leu Ile Arg Lys
 705 710 715 720

Pro Cys Val Leu Ile Leu Asp Asp Ala Thr Ser Ala Leu Asp Ala Asn
 725 730 735

Ser Gln Leu Gln Val Glu Gln Leu Leu Tyr Glu Ser Pro Glu Arg Tyr
 740 745 750

Ser Arg Ser Val Leu Leu Ile Thr Gln His Leu Ser Leu Val Glu Gln

755

760

765

Ala Asp His Ile Leu Phe Leu Glu Gly Gly Ala Ile Arg Glu Gly Gly
 770 775 780

Thr His Gln Gln Leu Met Glu Lys Lys Gly Cys Tyr Trp Ala Met Val
 785 790 795 800

Gln Ala Pro Ala Asp Ala Pro Glu
 805

<210> 2485
 <211> 453
 <212> PRT
 <213> Homo sapiens

<400> 2485

Met Ala Arg Lys Val Val Ser Arg Lys Arg Lys Ala Pro Ala Ser Pro
 1 5 10 15

Gly Ala Gly Ser Asp Ala Gln Gly Pro Gln Phe Gly Trp Asp His Ser
 20 25 30

Leu His Lys Arg Lys Arg Leu Pro Pro Val Lys Arg Ser Leu Val Tyr
 35 40 45

Tyr Leu Lys Asn Arg Glu Val Arg Leu Gln Asn Glu Thr Ser Tyr Ser
 50 55 60

Arg Val Leu His Gly Tyr Ala Ala Gln Gln Leu Pro Ser Leu Leu Lys
 65 70 75 80

Glu Arg Glu Phe His Leu Gly Thr Leu Asn Lys Val Phe Ala Ser Gln
 85 90 95

Trp Leu Asn His Arg Gln Val Val Cys Gly Thr Lys Cys Asn Thr Leu
 100 105 110

Phe Val Val Asp Val Gln Thr Ser Gln Ile Thr Lys Ile Pro Ile Leu
 115 120 125

Lys Asp Arg Glu Pro Gly Gly Val Thr Gln Gln Gly Cys Gly Ile His
 130 135 140

Ala Ile Glu Leu Asn Pro Ser Arg Thr Leu Leu Ala Thr Gly Gly Asp
 145 150 155 160

Asn Pro Asn Ser Leu Ala Ile Tyr Arg Leu Pro Thr Leu Asp Pro Val
 165 170 175

Cys Val Gly Asp Asp Gly His Lys Asp Trp Ile Phe Ser Ile Ala Trp
 180 185 190

Ile Ser Asp Thr Met Ala Val Ser Gly Ser Arg Asp Gly Ser Met Gly
 195 200 205

Leu Trp Glu Val Thr Asp Asp Val Leu Thr Lys Ser Asp Ala Arg His
 210 215 220

Asn Val Ser Arg Val Pro Val Tyr Ala His Ile Thr His Lys Ala Leu
 225 230 235 240

Lys Asp Ile Pro Lys Glu Asp Thr Asn Pro Asp Asn Cys Lys Val Arg
 245 250 255

Ala Leu Ala Phe Asn Asn Lys Asn Lys Glu Leu Gly Ala Val Ser Leu
 260 265 270

Asp Gly Tyr Phe His Leu Trp Lys Ala Glu Asn Thr Leu Ser Lys Leu
 275 280 285

Leu Ser Thr Lys Leu Pro Tyr Cys Arg Glu Asn Val Cys Leu Ala Tyr
 290 295 300

Gly Ser Glu Trp Ser Val Tyr Ala Val Gly Ser Gln Ala His Val Ser
 305 310 315 320

Phe Leu Asp Pro Arg Gln Pro Ser Tyr Asn Val Lys Ser Val Cys Ser
 325 330 335

Arg Glu Arg Gly Ser Gly Ile Arg Ser Val Ser Phe Tyr Glu His Ile
 340 345 350

Ile Thr Val Gly Thr Gly Gln Gly Ser Leu Leu Phe Tyr Asp Ile Arg
 355 360 365

Ala Gln Arg Phe Leu Glu Glu Arg Leu Ser Ala Cys Tyr Gly Ser Lys
 370 375 380

Pro Arg Leu Ala Gly Glu Asn Leu Lys Leu Thr Thr Gly Lys Gly Trp
 385 390 395 400

Leu Asn His Asp Glu Thr Trp Arg Asn Tyr Phe Ser Asp Ile Asp Phe
 405 410 415

Phe Pro Asn Ala Val Tyr Thr His Cys Tyr Asp Ser Ser Gly Thr Lys
 420 425 430

Leu Phe Val Ala Gly Gly Pro Leu Pro Ser Gly Leu His Gly Asn Tyr
 435 440 445

Ala Gly Leu Trp Ser
 450

<210> 2486

<211> 352

<212> PRT

<213> Homo sapiens

<400> 2486

Met Glu Gly Ile Ser Ile Tyr Thr Ser Asp Asn Tyr Thr Glu Glu Met
 1 5 10 15

Gly Ser Gly Asp Tyr Asp Ser Met Lys Glu Pro Cys Phe Arg Glu Glu
 20 25 30

Asn Ala Asn Phe Asn Lys Ile Phe Leu Pro Thr Ile Tyr Ser Ile Ile
 35 40 45

Phe Leu Thr Gly Ile Val Gly Asn Gly Leu Val Ile Leu Val Met Gly
 50 55 60

Tyr Gln Lys Lys Leu Arg Ser Met Thr Asp Lys Tyr Arg Leu His Leu
 65 70 75 80

Ser Val Ala Asp Leu Leu Phe Val Ile Thr Leu Pro Phe Trp Ala Val
 85 90 95

Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
 100 105 110

His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
 115 120 125

Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
 130 135 140

Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
 145 150 155 160

Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
 165 170 175

Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
 180 185 190

Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
 195 200 205

Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
 210 215 220

Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
 225 230 235 240

Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
 245 250 255

Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
 260 265 270

Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
 275 280 285

Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe
 290 295 300

Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
 305 310 315 320

Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
 325 330 335

His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
 340 345 350

<210> 2487

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2487

Met Ser Ser Glu Asn Cys Phe Val Ala Glu Asn Ser Ser Leu His Pro
 1 5 10 15

Glu Ser Gly Gln Glu Asn Asp Ala Thr Ser Pro His Phe Ser Thr Arg
20 25 30

His Glu Gly Ser Phe Gln Val Pro Val Leu Cys Ala Val Met Asn Val
35 40 45

Val Phe Ile Thr Ile Leu Ile Ile Ala Leu Ile Ala Leu Ser Val Gly
50 55 60

Gln Tyr Asn Cys Pro Gly Gln Tyr Thr Phe Ser Met Pro Ser Asp Ser
65 70 75 80

His Val Ser Ser Cys Ser Glu Asp Trp Val Gly Tyr Gln Arg Lys Cys
85 90 95

Tyr Phe Ile Ser Thr Val Lys Arg Ser Trp Thr Ser Ala Gln Asn Ala
100 105 110

Cys Ser Glu His Gly Ala Thr Leu Ala Val Ile Asp Ser Glu Lys Asp
115 120 125

Met Asn Phe Leu Lys Arg Tyr Ala Gly Arg Glu Glu His Trp Val Gly
130 135 140

Leu Lys Lys Glu Pro Gly His Pro Trp Lys Trp Ser Asn Gly Lys Glu
145 150 155 160

Phe Asn Asn Trp Phe Asn Val Thr Gly Ser Asp Lys Cys Val Phe Leu
165 170 175

Lys Asn Thr Glu Val Ser Ser Met Glu Cys Glu Lys Asn Leu Tyr Trp
180 185 190

Ile Cys Asn Lys Pro Tyr Lys
195

<210> 2488

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2488

Met Lys Val Ser Ala Ala Ala Leu Ala Val Ile Leu Ile Ala Thr Ala
1 5 10 15

Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro
20 25 30

Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys
 35 40 45

Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe
 50 55 60

Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp
 65 70 75 80

Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser
 85 90

<210> 2489

<211> 212

<212> PRT

<213> Homo sapiens

<400> 2489

Met Asn Ser Phe Ser Thr Ser Ala Phe Gly Pro Val Ala Phe Ser Leu
 1 5 10 15

Gly Leu Leu Leu Val Leu Pro Ala Ala Phe Pro Ala Pro Val Pro Pro
 20 25 30

Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln Pro Leu Thr
 35 40 45

Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu Asp Gly Ile
 50 55 60

Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met Cys Glu Ser
 65 70 75 80

Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro Lys Met Ala
 85 90 95

Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu Thr Cys Leu
 100 105 110

Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr Leu Glu Tyr
 115 120 125

Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg Ala Val Gln
 130 135 140

Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys Ala Lys Asn
 145 150 155 160

Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala Ser Leu Leu
 165 170 175

Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met Thr Thr His
 180 185 190

Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser Leu Arg Ala
 195 200 205

Leu Arg Gln Met
 210

<210> 2490

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2490

Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu
 1 5 10 15

Val Thr Asn Ser Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu
 20 25 30

Gln Leu Glu His Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile
 35 40 45

Asn Asn Tyr Lys Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe
 50 55 60

Tyr Met Pro Lys Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu
 65 70 75 80

Glu Glu Leu Lys Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys
 85 90 95

Asn Phe His Leu Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile
 100 105 110

Val Leu Glu Leu Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala
 115 120 125

Asp Glu Thr Ala Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe
 130 135 140

Cys Gln Ser Ile Ile Ser Thr Leu Thr
145 150

<210> 2491

<211> 231

<212> PRT

<213> Homo sapiens

<400> 2491

Met Gln Asp Glu Glu Arg Tyr Met Thr Leu Asn Val Gln Ser Lys Lys
1 5 10 15

Arg Ser Ser Ala Gln Thr Ser Gln Leu Thr Phe Lys Asp Tyr Ser Val
20 25 30

Thr Leu His Trp Tyr Lys Ile Leu Leu Gly Ile Ser Gly Thr Val Asn
35 40 45

Gly Ile Leu Thr Leu Thr Leu Ile Ser Leu Ile Leu Leu Val Ser Gln
50 55 60

Gly Val Leu Leu Lys Cys Gln Lys Gly Ser Cys Ser Asn Ala Thr Gln
65 70 75 80

Tyr Glu Asp Thr Gly Asp Leu Lys Val Asn Asn Gly Thr Arg Arg Asn
85 90 95

Ile Ser Asn Lys Asp Leu Cys Ala Ser Arg Ser Ala Asp Gln Thr Val
100 105 110

Leu Cys Gln Ser Glu Trp Leu Lys Tyr Gln Gly Lys Cys Tyr Trp Phe
115 120 125

Ser Asn Glu Met Lys Ser Trp Ser Asp Ser Tyr Val Tyr Cys Leu Glu
130 135 140

Arg Lys Ser His Leu Leu Ile Ile His Asp Gln Leu Glu Met Ala Phe
145 150 155 160

Ile Gln Lys Asn Leu Arg Gln Leu Asn Tyr Val Trp Ile Gly Leu Asn
165 170 175

Phe Thr Ser Leu Lys Met Thr Trp Thr Trp Val Asp Gly Ser Pro Ile
180 185 190

Asp Ser Lys Ile Phe Phe Ile Lys Gly Pro Ala Lys Glu Asn Ser Cys
 195 200 205

Ala Ala Ile Lys Glu Ser Lys Ile Phe Ser Glu Thr Cys Ser Ser Val
 210 215 220

Phe Lys Trp Ile Cys Gln Tyr
 225 230

<210> 2492

<211> 512

<212> PRT

<213> Homo sapiens

<400> 2492

Met Gly Cys Ile Lys Ser Lys Gly Lys Asp Ser Leu Ser Asp Asp Gly
 1 5 10 15

Val Asp Leu Lys Thr Gln Pro Val Arg Asn Thr Glu Arg Thr Ile Tyr
 20 25 30

Val Arg Asp Pro Thr Ser Asn Lys Gln Gln Arg Pro Val Pro Glu Ser
 35 40 45

Gln Leu Leu Pro Gly Gln Arg Phe Gln Thr Lys Asp Pro Glu Glu Gln
 50 55 60

Gly Asp Ile Val Val Ala Leu Tyr Pro Tyr Asp Gly Ile His Pro Asp
 65 70 75 80

Asp Leu Ser Phe Lys Lys Gly Glu Lys Met Lys Val Leu Glu Glu His
 85 90 95

Gly Glu Trp Trp Lys Ala Lys Ser Leu Leu Thr Lys Lys Glu Gly Phe
 100 105 110

Ile Pro Ser Asn Tyr Val Ala Lys Leu Asn Thr Leu Glu Thr Glu Glu
 115 120 125

Trp Phe Phe Lys Asp Ile Thr Arg Lys Asp Ala Glu Arg Gln Leu Leu
 130 135 140

Ala Pro Gly Asn Ser Ala Gly Ala Phe Leu Ile Arg Glu Ser Glu Thr
 145 150 155 160

Leu Lys Gly Ser Phe Ser Leu Ser Val Arg Asp Phe Asp Pro Val His
 165 170 175

Gly Asp Val Ile Lys His Tyr Lys Ile Arg Ser Leu Asp Asn Gly Gly
 180 185 190

Tyr Tyr Ile Ser Pro Arg Ile Thr Phe Pro Cys Ile Ser Asp Met Ile
 195 200 205

Lys His Tyr Gln Lys Gln Ala Asp Gly Leu Cys Arg Leu Glu Lys
 210 215 220

Ala Cys Ile Ser Pro Lys Pro Gln Lys Pro Trp Asp Lys Asp Ala Trp
 225 230 235 240

Glu Ile Pro Arg Glu Ser Ile Lys Leu Val Lys Arg Leu Gly Ala Gly
 245 250 255

Gln Phe Gly Glu Val Trp Met Gly Tyr Tyr Asn Asn Ser Thr Lys Val
 260 265 270

Ala Val Lys Thr Leu Lys Pro Gly Thr Met Ser Val Gln Ala Phe Leu
 275 280 285

Glu Glu Ala Asn Leu Met Lys Thr Leu Gln His Asp Lys Leu Val Arg
 290 295 300

Leu Tyr Ala Val Val Thr Arg Glu Glu Pro Ile Tyr Ile Ile Thr Glu
 305 310 315 320

Tyr Met Ala Lys Gly Ser Leu Leu Asp Phe Leu Lys Ser Asp Glu Gly
 325 330 335

Gly Lys Val Leu Leu Pro Lys Leu Ile Asp Phe Ser Ala Gln Ile Ala
 340 345 350

Glu Gly Met Ala Tyr Ile Glu Arg Lys Asn Tyr Ile His Arg Asp Leu
 355 360 365

Arg Ala Ala Asn Val Leu Val Ser Glu Ser Leu Met Cys Lys Ile Ala
 370 375 380

Asp Phe Gly Leu Ala Arg Val Ile Glu Asp Asn Glu Tyr Thr Ala Arg
 385 390 395 400

Glu Gly Ala Lys Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ile Asn
 405 410 415

Phe Gly Cys Phe Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu
 420 425 430

Leu Tyr Glu Ile Val Thr Tyr Gly Lys Ile Pro Tyr Pro Gly Arg Thr
 435 440 445

Asn Ala Asp Val Met Thr Ala Leu Ser Gln Gly Tyr Arg Met Pro Arg
 450 455 460

Val Glu Asn Cys Pro Asp Glu Leu Tyr Asp Ile Met Lys Met Cys Trp
 465 470 475 480

Lys Glu Lys Ala Glu Glu Arg Pro Thr Phe Asp Tyr Leu Gln Ser Val
 485 490 495

Leu Asp Asp Phe Tyr Thr Ala Thr Glu Gly Gln Tyr Gln Gln Gln Pro
 500 505 510

<210> 2493

<211> 272

<212> PRT

<213> Homo sapiens

<400> 2493

Met Asp Ser Tyr Leu Leu Met Trp Gly Leu Leu Thr Phe Ile Met Val
 1 5 10 15

Pro Gly Cys Gln Ala Glu Leu Cys Asp Asp Asp Pro Pro Glu Ile Pro
 20 25 30

His Ala Thr Phe Lys Ala Met Ala Tyr Lys Glu Gly Thr Met Leu Asn
 35 40 45

Cys Glu Cys Lys Arg Gly Phe Arg Arg Ile Lys Ser Gly Ser Leu Tyr
 50 55 60

Met Leu Cys Thr Gly Asn Ser Ser His Ser Ser Trp Asp Asn Gln Cys
 65 70 75 80

Gln Cys Thr Ser Ser Ala Thr Arg Asn Thr Thr Lys Gln Val Thr Pro
 85 90 95

Gln Pro Glu Glu Gln Lys Glu Arg Lys Thr Thr Glu Met Gln Ser Pro
 100 105 110

Met Gln Pro Val Asp Gln Ala Ser Leu Pro Gly His Cys Arg Glu Pro

115

120

125

Pro Pro Trp Glu Asn Glu Ala Thr Glu Arg Ile Tyr His Phe Val Val
 130 135 140

Gly Gln Met Val Tyr Tyr Gln Cys Val Gln Gly Tyr Arg Ala Leu His
 145 150 155 160

Arg Gly Pro Ala Glu Ser Val Cys Lys Met Thr His Gly Lys Thr Arg
 165 170 175

Trp Thr Gln Pro Gln Leu Ile Cys Thr Gly Glu Met Glu Thr Ser Gln
 180 185 190

Phe Pro Gly Glu Glu Lys Pro Gln Ala Ser Pro Glu Gly Arg Pro Glu
 195 200 205

Ser Glu Thr Ser Cys Leu Val Thr Thr Thr Asp Phe Gln Ile Gln Thr
 210 215 220

Glu Met Ala Ala Thr Met Glu Thr Ser Ile Phe Thr Thr Glu Tyr Gln
 225 230 235 240

Val Ala Val Ala Gly Cys Val Phe Leu Leu Ile Ser Val Leu Leu Leu
 245 250 255

Ser Gly Leu Thr Trp Gln Arg Arg Gln Arg Lys Ser Arg Arg Thr Ile
 260 265 270

<210> 2494

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2494

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala
 1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr
 20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val
 35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val
 50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser
 65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn
 85 90

<210> 2495

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2495

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val Val
 1 5 10 15

Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr Met Leu
 20 25 30

Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu Pro Arg Ala
 35 40 45

Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val Leu Gln Glu Trp
 50 55 60

Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu Lys Arg Gln Ile Ala
 65 70 75 80

Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser Glu Gln Leu Arg Asn Gly
 85 90 95

Gln Tyr Gln Ala Ser Asp Ala Ala Gly Leu Gly Leu Asp Arg Ser Pro
 100 105 110

Pro Glu Lys Thr Gln Ala Asp Leu Leu Ala Phe Leu His Ser Gln Val
 115 120 125

Asp Lys Ala Glu Val Asn Ala Gly Val Lys Leu Ala Thr Glu Tyr Ala
 130 135 140

Ala Val Pro Phe Asp Ser Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu
 145 150 155 160

Thr Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys
 165 170 175

Arg Asp Glu Leu Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn

180										185										190										
Asn	Pro	Ala	Glu	Asn	Ser	Pro	Asn	His	Arg	Pro	Tyr	Thr	Ala	Ser	Asp															
		195						200					205																	
Phe	Ile	Glu	Gly	Ile	Tyr	Arg	Thr	Glu	Arg	Asp	Lys	Gly	Thr	Leu	Tyr															
		210				215					220																			
Glu	Leu	Thr	Phe	Lys	Gly	Asp	His	Lys	His	Glu	Phe	Lys	Arg	Leu	Ile															
		225			230					235					240															
Leu	Phe	Arg	Pro	Phe	Gly	Pro	Ile	Met	Lys	Val	Lys	Asn	Glu	Lys	Leu															
				245					250					255																
Asn	Met	Ala	Asn	Thr	Leu	Ile	Asn	Val	Ile	Val	Pro	Leu	Ala	Lys	Arg															
				260				265						270																
Val	Asp	Lys	Phe	Arg	Gln	Phe	Met	Gln	Asn	Phe	Arg	Glu	Met	Cys	Ile															
		275				280						285																		
Glu	Gln	Asp	Gly	Arg	Val	His	Leu	Thr	Val	Val	Tyr	Phe	Gly	Lys	Glu															
		290				295					300																			
Glu	Ile	Asn	Glu	Val	Lys	Gly	Ile	Leu	Glu	Asn	Thr	Ser	Lys	Ala	Ala															
		305			310					315					320															
Asn	Phe	Arg	Asn	Phe	Thr	Phe	Ile	Gln	Leu	Asn	Gly	Glu	Phe	Ser	Arg															
				325					330					335																
Gly	Lys	Gly	Leu	Asp	Val	Gly	Ala	Arg	Phe	Trp	Lys	Gly	Ser	Asn	Val															
			340				345						350																	
Leu	Leu	Phe	Phe	Cys	Asp	Val	Asp	Ile	Tyr	Phe	Thr	Ser	Glu	Phe	Leu															
		355				360						365																		
Asn	Thr	Cys	Arg	Leu	Asn	Thr	Gln	Pro	Gly	Lys	Lys	Val	Phe	Tyr	Pro															
		370				375					380																			
Val	Leu	Phe	Ser	Gln	Tyr	Asn	Pro	Gly	Ile	Ile	Tyr	Gly	His	His	Asp															
		385			390				395					400																
Ala	Val	Pro	Pro	Leu	Glu	Gln	Gln	Leu	Val	Ile	Lys	Lys	Glu	Thr	Gly															
				405				410						415																
Phe	Trp	Arg	Asp	Phe	Gly	Phe	Gly	Met	Thr	Cys	Gln	Tyr	Arg	Ser	Asp															
			420				425						430																	

Phe Ile Asn Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly
 435 440 445

Glu Asp Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val
 450 455 460

Val Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg
 465 470 475 480

Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln Ser
 485 490 495

Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu Val Phe
 500 505 510

Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln Lys Thr Ser
 515 520 525

Ser Lys Lys Thr
 530

<210> 2496

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2496

Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val
 1 5 10 15

Leu Ile Gly Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser
 20 25 30

Cys Ile Ser Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp
 35 40 45

Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile
 50 55 60

Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala
 65 70 75 80

Asp Val Lys Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys
 85 90 95

Lys Lys Gln Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys
 100 105 110

Val Arg Lys Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr
 115 120 125

<210> 2497
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2497

Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu
 1 5 10 15

Ser Gly Ile Gln Gly Val Pro Leu Ser Arg Thr Val Arg Cys Thr Cys
 20 25 30

Ile Ser Ile Ser Asn Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu
 35 40 45

Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Val Glu Ile Ile Ala
 50 55 60

Thr Met Lys Lys Lys Gly Glu Lys Arg Cys Leu Asn Pro Glu Ser Lys
 65 70 75 80

Ala Ile Lys Asn Leu Leu Lys Ala Val Ser Lys Glu Met Ser Lys Arg
 85 90 95

Ser Pro

<210> 2498
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2498

Met Thr Pro Gly Lys Thr Ser Leu Val Ser Leu Leu Leu Leu Ser
 1 5 10 15

Leu Glu Ala Ile Val Lys Ala Gly Ile Thr Ile Pro Arg Asn Pro Gly
 20 25 30

Cys Pro Asn Ser Glu Asp Lys Asn Phe Pro Arg Thr Val Met Val Asn
 35 40 45

Leu Asn Ile His Asn Arg Asn Thr Asn Thr Asn Pro Lys Arg Ser Ser
 50 55 60

Asp Tyr Tyr Asn Arg Ser Thr Ser Pro Trp Asn Leu His Arg Asn Glu
 65 70 75 80

Asp Pro Glu Arg Tyr Pro Ser Val Ile Trp Glu Ala Lys Cys Arg His
 85 90 95

Leu Gly Cys Ile Asn Ala Asp Gly Asn Val Asp Tyr His Met Asn Ser
 100 105 110

Val Pro Ile Gln Gln Glu Ile Leu Val Leu Arg Arg Glu Pro Pro His
 115 120 125

Cys Pro Asn Ser Phe Arg Leu Glu Lys Ile Leu Val Ser Val Gly Cys
 130 135 140

Thr Cys Val Thr Pro Ile Val His His Val Ala
 145 150 155

<210> 2499

<211> 162

<212> PRT

<213> Homo sapiens

<400> 2499

Met Arg Ile Ser Lys Pro His Leu Arg Ser Ile Ser Ile Gln Cys Tyr
 1 5 10 15

Leu Cys Leu Leu Leu Asn Ser His Phe Leu Thr Glu Ala Gly Ile His
 20 25 30

Val Phe Ile Leu Gly Cys Phe Ser Ala Gly Leu Pro Lys Thr Glu Ala
 35 40 45

Asn Trp Val Asn Val Ile Ser Asp Leu Lys Lys Ile Glu Asp Leu Ile
 50 55 60

Gln Ser Met His Ile Asp Ala Thr Leu Tyr Thr Glu Ser Asp Val His
 65 70 75 80

Pro Ser Cys Lys Val Thr Ala Met Lys Cys Phe Leu Leu Glu Leu Gln
 85 90 95

Val Ile Ser Leu Glu Ser Gly Asp Ala Ser Ile His Asp Thr Val Glu

100

105

110

Asn Leu Ile Ile Leu Ala Asn Asn Ser Leu Ser Ser Asn Gly Asn Val
 115 120 125

Thr Glu Ser Gly Cys Lys Glu Cys Glu Glu Leu Glu Glu Lys Asn Ile
 130 135 140

Lys Glu Phe Leu Gln Ser Phe Val His Ile Val Gln Met Phe Ile Asn
 145 150 155 160

Thr Ser

<210> 2500
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 2500

Met His Ser Ser Ala Leu Leu Cys Cys Leu Val Leu Leu Thr Gly Val
 1 5 10 15

Arg Ala Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His
 20 25 30

Phe Pro Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe
 35 40 45

Ser Arg Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu
 50 55 60

Leu Leu Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys
 65 70 75 80

Gln Ala Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro
 85 90 95

Gln Ala Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu
 100 105 110

Gly Glu Asn Leu Lys Thr Leu Arg Leu Arg Arg Cys His Arg
 115 120 125

Phe Leu Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn
 130 135 140

Ala Phe Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu
 145 150 155 160

Phe Asp Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile
 165 170 175

Arg Asn

<210> 2501

<211> 166

<212> PRT

<213> Homo sapiens

<400> 2501

Met Lys Tyr Thr Ser Tyr Ile Leu Ala Phe Gln Leu Cys Ile Val Leu
 1 5 10 15

Gly Ser Leu Gly Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu
 20 25 30

Asn Leu Lys Lys Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn
 35 40 45

Gly Thr Leu Phe Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp
 50 55 60

Arg Lys Ile Met Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe
 65 70 75 80

Lys Asn Phe Lys Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile
 85 90 95

Lys Glu Asp Met Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg
 100 105 110

Asp Asp Phe Glu Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val
 115 120 125

Gln Arg Lys Ala Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser
 130 135 140

Pro Ala Ala Lys Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln
 145 150 155 160

Gly Arg Arg Ala Ser Gln

165

<210> 2502

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2502

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Cys Met Thr Ala Leu Thr
 1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
 20 25 30

Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn
 35 40 45

Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu
 50 55 60

Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr
 100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val Glu Pro Lys Val
 115 120 125

Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205

Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265

<210> 2503

<211> 210

<212> PRT

<213> Homo sapiens

<400> 2503

Met Arg Pro Arg Leu Trp Leu Leu Leu Ala Ala Gln Leu Thr Val Leu
 1 5 10 15

His Gly Asn Ser Val Leu Gln Gln Thr Pro Ala Tyr Ile Lys Val Gln
 20 25 30

Thr Asn Lys Met Val Met Leu Ser Cys Glu Ala Lys Ile Ser Leu Ser
 35 40 45

Asn Met Arg Ile Tyr Trp Leu Arg Gln Arg Gln Ala Pro Ser Ser Asp
 50 55 60

Ser His His Glu Phe Leu Ala Leu Trp Asp Ser Ala Lys Gly Thr Ile
 65 70 75 80

His Gly Glu Glu Val Glu Gln Glu Lys Ile Ala Val Phe Arg Asp Ala
 85 90 95

Ser Arg Phe Ile Leu Asn Leu Thr Ser Val Lys Pro Glu Asp Ser Gly
 100 105 110

Ile Tyr Phe Cys Met Ile Val Gly Ser Pro Glu Leu Thr Phe Gly Lys
 115 120 125

Gly Thr Gln Leu Ser Val Val Asp Phe Leu Pro Thr Thr Ala Gln Pro
 130 135 140

Thr Lys Lys Ser Thr Leu Lys Lys Arg Val Cys Arg Leu Pro Arg Pro

145

150

155

160

Glu Thr Gln Lys Gly Pro Leu Cys Ser Pro Ile Thr Leu Gly Leu Leu
 165 170 175

Val Ala Gly Val Leu Val Leu Val Ser Leu Gly Val Ala Ile His
 180 185 190

Leu Cys Cys Arg Arg Arg Arg Ala Arg Leu Arg Phe Met Lys Gln Phe
 195 200 205

Tyr Lys
 210

<210> 2504

<211> 458

<212> PRT

<213> Homo sapiens

<400> 2504

Met Asn Arg Gly Val Pro Phe Arg His Leu Leu Leu Val Leu Gln Leu
 1 5 10 15

Ala Leu Leu Pro Ala Ala Thr Gln Gly Lys Lys Val Val Leu Gly Lys
 20 25 30

Lys Gly Asp Thr Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser
 35 40 45

Ile Gln Phe His Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn
 50 55 60

Gln Gly Ser Phe Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala
 65 70 75 80

Asp Ser Arg Arg Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile
 85 90 95

Lys Asn Leu Lys Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu Val Glu
 100 105 110

Asp Gln Lys Glu Glu Val Gln Leu Leu Val Phe Gly Leu Thr Ala Asn
 115 120 125

Ser Asp Thr His Leu Leu Gln Gly Gln Ser Leu Thr Leu Thr Leu Glu
 130 135 140

Ser Pro Pro Gly Ser Ser Pro Ser Val Gln Cys Arg Ser Pro Arg Gly
 145 150 155 160

Lys Asn Ile Gln Gly Gly Lys Thr Leu Ser Val Ser Gln Leu Glu Leu
 165 170 175

Gln Asp Ser Gly Thr Trp Thr Cys Thr Val Leu Gln Asn Gln Lys Lys
 180 185 190

Val Glu Phe Lys Ile Asp Ile Val Val Leu Ala Phe Gln Lys Ala Ser
 195 200 205

Ser Ile Val Tyr Lys Lys Glu Gly Glu Gln Val Glu Phe Ser Phe Pro
 210 215 220

Leu Ala Phe Thr Val Glu Lys Leu Thr Gly Ser Gly Glu Leu Trp Trp
 225 230 235 240

Gln Ala Glu Arg Ala Ser Ser Ser Lys Ser Trp Ile Thr Phe Asp Leu
 245 250 255

Lys Asn Lys Glu Val Ser Val Lys Arg Val Thr Gln Asp Pro Lys Leu
 260 265 270

Gln Met Gly Lys Lys Leu Pro Leu His Leu Thr Leu Pro Gln Ala Leu
 275 280 285

Pro Gln Tyr Ala Gly Ser Gly Asn Leu Thr Leu Ala Leu Glu Ala Lys
 290 295 300

Thr Gly Lys Leu His Gln Glu Val Asn Leu Val Val Met Arg Ala Thr
 305 310 315 320

Gln Leu Gln Lys Asn Leu Thr Cys Glu Val Trp Gly Pro Thr Ser Pro
 325 330 335

Lys Leu Met Leu Ser Leu Lys Leu Glu Asn Lys Glu Ala Lys Val Ser
 340 345 350

Lys Arg Glu Lys Ala Val Trp Val Leu Asn Pro Glu Ala Gly Met Trp
 355 360 365

Gln Cys Leu Leu Ser Asp Ser Gly Gln Val Leu Leu Glu Ser Asn Ile
 370 375 380

Lys Val Leu Pro Thr Trp Ser Thr Pro Val Gln Pro Met Ala Leu Ile
 385 390 395 400

Val Leu Gly Gly Val Ala Gly Leu Leu Leu Phe Ile Gly Leu Gly Ile
 405 410 415

Phe Phe Cys Val Arg Cys Arg His Arg Arg Arg Gln Ala Glu Arg Met
 420 425 430

Ser Gln Ile Lys Arg Leu Leu Ser Glu Lys Lys Thr Cys Gln Cys Pro
 435 440 445

His Arg Phe Gln Lys Thr Cys Ser Pro Ile
 450 455

<210> 2505

<211> 368

<212> PRT

<213> Homo sapiens

<400> 2505

Met Val Leu Glu Val Ser Asp His Gln Val Leu Asn Asp Ala Glu Val
 1 5 10 15

Ala Ala Leu Leu Glu Asn Phe Ser Ser Ser Tyr Asp Tyr Gly Glu Asn
 20 25 30

Glu Ser Asp Ser Cys Cys Thr Ser Pro Pro Cys Pro Gln Asp Phe Ser
 35 40 45

Leu Asn Phe Asp Arg Ala Phe Leu Pro Ala Leu Tyr Ser Leu Leu Phe
 50 55 60

Leu Leu Gly Leu Leu Gly Asn Gly Ala Val Ala Ala Val Leu Leu Ser
 65 70 75 80

Arg Arg Thr Ala Leu Ser Ser Thr Asp Thr Phe Leu Leu His Leu Ala
 85 90 95

Val Ala Asp Thr Leu Leu Val Leu Thr Leu Pro Leu Trp Ala Val Asp
 100 105 110

Ala Ala Val Gln Trp Val Phe Gly Ser Gly Leu Cys Lys Val Ala Gly
 115 120 125

Ala Leu Phe Asn Ile Asn Phe Tyr Ala Gly Ala Leu Leu Leu Ala Cys
 130 135 140

Ile Ser Phe Asp Arg Tyr Leu Asn Ile Val His Ala Thr Gln Leu Tyr
 145 150 155 160

Arg Arg Gly Pro Pro Ala Arg Val Thr Leu Thr Cys Leu Ala Val Trp
 165 170 175

Gly Leu Cys Leu Leu Phe Ala Leu Pro Asp Phe Ile Phe Leu Ser Ala
 180 185 190

His His Asp Glu Arg Leu Asn Ala Thr His Cys Gln Tyr Asn Phe Pro
 195 200 205

Gln Val Gly Arg Thr Ala Leu Arg Val Leu Gln Leu Val Ala Gly Phe
 210 215 220

Leu Leu Pro Leu Leu Val Met Ala Tyr Cys Tyr Ala His Ile Leu Ala
 225 230 235 240

Val Leu Leu Val Ser Arg Gly Gln Arg Arg Leu Arg Ala Met Arg Leu
 245 250 255

Val Val Val Val Val Val Ala Phe Ala Leu Cys Trp Thr Pro Tyr His
 260 265 270

Leu Val Val Leu Val Asp Ile Leu Met Asp Leu Gly Ala Leu Ala Arg
 275 280 285

Asn Cys Gly Arg Glu Ser Arg Val Asp Val Ala Lys Ser Val Thr Ser
 290 295 300

Gly Leu Gly Tyr Met His Cys Cys Leu Asn Pro Leu Leu Tyr Ala Phe
 305 310 315 320

Val Gly Val Lys Phe Arg Glu Arg Met Trp Met Leu Leu Leu Arg Leu
 325 330 335

Gly Cys Pro Asn Gln Arg Gly Leu Gln Arg Gln Pro Ser Ser Ser Arg
 340 345 350

Arg Asp Ser Ser Trp Ser Glu Thr Ser Glu Ala Ser Tyr Ser Gly Leu
 355 360 365

<210> 2506
 <211> 107
 <212> PRT

<213> Homo sapiens

<400> 2506

Met Ala Arg Ala Ala Leu Ser Ala Ala Pro Ser Asn Pro Arg Leu Leu
 1 5 10 15

Arg Val Ala Leu Leu Leu Leu Leu Val Ala Ala Gly Arg Arg Ala
 20 25 30

Ala Gly Ala Ser Val Ala Thr Glu Leu Arg Cys Gln Cys Leu Gln Thr
 35 40 45

Leu Gln Gly Ile His Pro Lys Asn Ile Gln Ser Val Asn Val Lys Ser
 50 55 60

Pro Gly Pro His Cys Ala Gln Thr Glu Val Ile Ala Thr Leu Lys Asn
 65 70 75 80

Gly Arg Lys Ala Cys Leu Asn Pro Ala Ser Pro Ile Val Lys Lys Ile
 85 90 95

Ile Glu Lys Met Leu Asn Ser Asp Lys Ser Asn
 100 105

<210> 2507

<211> 558

<212> PRT

<213> Homo sapiens

<400> 2507

Met Ala Ala Leu Thr Arg Asp Pro Gln Phe Gln Lys Leu Gln Gln Trp
 1 5 10 15

Tyr Arg Glu His Arg Ser Glu Leu Asn Leu Arg Arg Leu Phe Asp Ala
 20 25 30

Asn Lys Asp Arg Phe Asn His Phe Ser Leu Thr Leu Asn Thr Asn His
 35 40 45

Gly His Ile Leu Val Asp Tyr Ser Lys Asn Leu Val Thr Glu Asp Val
 50 55 60

Met Arg Met Leu Val Asp Leu Ala Lys Ser Arg Gly Val Glu Ala Ala
 65 70 75 80

Arg Glu Arg Met Phe Asn Gly Glu Lys Ile Asn Tyr Thr Glu Gly Arg
 85 90 95

Ala Val Leu His Val Ala Leu Arg Asn Arg Ser Asn Thr Pro Ile Leu
100 105 110

Val Asp Gly Lys Asp Val Met Pro Glu Val Asn Lys Val Leu Asp Lys
115 120 125

Met Lys Ser Phe Cys Gln Arg Val Arg Ser Gly Asp Trp Lys Gly Tyr
130 135 140

Thr Gly Lys Thr Ile Thr Asp Val Ile Asn Ile Gly Ile Gly Gly Ser
145 150 155 160

Asp Leu Gly Pro Leu Met Val Thr Glu Ala Leu Lys Pro Tyr Ser Ser
165 170 175

Gly Gly Pro Arg Val Trp Tyr Val Ser Asn Ile Asp Gly Thr His Ile
180 185 190

Ala Lys Thr Leu Ala Gln Leu Asn Pro Glu Ser Ser Leu Phe Ile Ile
195 200 205

Ala Ser Lys Thr Phe Thr Thr Gln Glu Thr Ile Thr Asn Ala Glu Thr
210 215 220

Ala Lys Glu Trp Phe Leu Gln Ala Ala Lys Asp Pro Ser Ala Val Ala
225 230 235 240

Lys His Phe Val Ala Leu Ser Thr Asn Thr Thr Lys Val Lys Glu Phe
245 250 255

Gly Ile Asp Pro Gln Asn Met Phe Glu Phe Trp Asp Trp Val Gly Gly
260 265 270

Arg Tyr Ser Leu Trp Ser Ala Ile Gly Leu Ser Ile Ala Leu His Val
275 280 285

Gly Phe Asp Asn Phe Glu Gln Leu Leu Ser Gly Ala His Trp Met Asp
290 295 300

Gln His Phe Arg Thr Thr Pro Leu Glu Lys Asn Ala Pro Val Leu Leu
305 310 315 320

Ala Leu Leu Gly Ile Trp Tyr Ile Asn Cys Phe Gly Cys Glu Thr His
325 330 335

Ala Met Leu Pro Tyr Asp Gln Tyr Leu His Arg Phe Ala Ala Tyr Phe
 340 345 350

Gln Gln Gly Asp Met Glu Ser Asn Gly Lys Tyr Ile Thr Lys Ser Gly
 355 360 365

Thr Arg Val Asp His Gln Thr Gly Pro Ile Val Trp Gly Glu Pro Gly
 370 375 380

Thr Asn Gly Gln His Ala Phe Tyr Gln Leu Ile His Gln Gly Thr Lys
 385 390 395 400

Met Ile Pro Cys Asp Phe Leu Ile Pro Val Gln Thr Gln His Pro Ile
 405 410 415

Arg Lys Gly Leu His His Lys Ile Leu Leu Ala Asn Phe Leu Ala Gln
 420 425 430

Thr Glu Ala Leu Met Arg Gly Lys Ser Thr Glu Glu Ala Arg Lys Glu
 435 440 445

Leu Gln Ala Ala Gly Lys Ser Pro Glu Asp Leu Glu Arg Leu Leu Pro
 450 455 460

His Lys Val Phe Glu Gly Asn Arg Pro Thr Asn Ser Ile Val Phe Thr
 465 470 475 480

Lys Leu Thr Pro Phe Met Leu Gly Ala Leu Val Ala Met Tyr Glu His
 485 490 495

Lys Ile Phe Val Gln Gly Ile Ile Trp Asp Ile Asn Ser Phe Asp Gln
 500 505 510

Trp Gly Val Glu Leu Gly Lys Gln Leu Ala Lys Lys Ile Glu Pro Glu
 515 520 525

Leu Asp Gly Ser Ala Gln Val Thr Ser His Asp Ala Ser Thr Asn Gly
 530 535 540

Leu Ile Asn Phe Ile Lys Gln Gln Arg Glu Ala Arg Val Gln
 545 550 555

<210> 2508

<211> 323

<212> PRT

<213> Homo sapiens

<400> 2508

```

Met Trp Pro Leu Val Ala Ala Leu Leu Leu Gly Ser Ala Cys Cys Gly
1           5           10           15

Ser Ala Gln Leu Leu Phe Asn Lys Thr Lys Ser Val Glu Phe Thr Phe
          20           25           30

Cys Asn Asp Thr Val Val Ile Pro Cys Phe Val Thr Asn Met Glu Ala
          35           40           45

Gln Asn Thr Thr Glu Val Tyr Val Lys Trp Lys Phe Lys Gly Arg Asp
          50           55           60

Ile Tyr Thr Phe Asp Gly Ala Leu Asn Lys Ser Thr Val Pro Thr Asp
65           70           75           80

Phe Ser Ser Ala Lys Ile Glu Val Ser Gln Leu Leu Lys Gly Asp Ala
          85           90           95

Ser Leu Lys Met Asp Lys Ser Asp Ala Val Ser His Thr Gly Asn Tyr
          100          105          110

Thr Cys Glu Val Thr Glu Leu Thr Arg Glu Gly Glu Thr Ile Ile Glu
          115          120          125

Leu Lys Tyr Arg Val Val Ser Trp Phe Ser Pro Asn Glu Asn Ile Leu
          130          135          140

Ile Val Ile Phe Pro Ile Phe Ala Ile Leu Leu Phe Trp Gly Gln Phe
145          150          155          160

Gly Ile Lys Thr Leu Lys Tyr Arg Ser Gly Gly Met Asp Glu Lys Thr
          165          170          175

Ile Ala Leu Leu Val Ala Gly Leu Val Ile Thr Val Ile Val Ile Val
          180          185          190

Gly Ala Ile Leu Phe Val Pro Gly Glu Tyr Ser Leu Lys Asn Ala Thr
          195          200          205

Gly Leu Gly Leu Ile Val Thr Ser Thr Gly Ile Leu Ile Leu Leu His
          210          215          220

Tyr Tyr Val Phe Ser Thr Ala Ile Gly Leu Thr Ser Phe Val Ile Ala
225          230          235          240

```

Ile Leu Val Ile Gln Val Ile Ala Tyr Ile Leu Ala Val Val Gly Leu
 245 250 255

Ser Leu Cys Ile Ala Ala Cys Ile Pro Met His Gly Pro Leu Leu Ile
 260 265 270

Ser Gly Leu Ser Ile Leu Ala Leu Ala Gln Leu Leu Gly Leu Val Tyr
 275 280 285

Met Lys Phe Val Ala Ser Asn Gln Lys Thr Ile Gln Pro Pro Arg Lys
 290 295 300

Ala Val Glu Glu Pro Leu Asn Ala Phe Lys Glu Ser Lys Gly Met Met
 305 310 315 320

Asn Asp Glu

<210> 2509

<211> 362

<212> PRT

<213> Homo sapiens

<400> 2509

Met Ala Pro Arg Ser Leu Leu Leu Leu Leu Ser Gly Ala Leu Ala Leu
 1 5 10 15

Thr Asp Thr Trp Ala Gly Ser His Ser Leu Arg Tyr Phe Ser Thr Ala
 20 25 30

Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Tyr Ile Ala Val Glu Tyr
 35 40 45

Val Asp Asp Thr Gln Phe Leu Arg Phe Asp Ser Asp Ala Ala Ile Pro
 50 55 60

Arg Met Glu Pro Arg Glu Pro Trp Val Glu Gln Glu Gly Pro Gln Tyr
 65 70 75 80

Trp Glu Trp Thr Thr Gly Tyr Ala Lys Ala Asn Ala Gln Thr Asp Arg
 85 90 95

Val Ala Leu Arg Asn Leu Leu Arg Arg Tyr Asn Gln Ser Glu Ala Gly
 100 105 110

Ser His Thr Leu Gln Gly Met Asn Gly Cys Asp Met Gly Pro Asp Gly
 115 120 125

Arg Leu Leu Arg Gly Tyr His Gln His Ala Tyr Asp Gly Lys Asp Tyr
 130 135 140

Ile Ser Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr Val
 145 150 155 160

Ala Gln Ile Thr Gln Arg Phe Tyr Glu Ala Glu Glu Tyr Ala Glu Glu
 165 170 175

Phe Arg Thr Tyr Leu Glu Gly Glu Cys Leu Glu Leu Leu Arg Arg Tyr
 180 185 190

Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Ala Asp Pro Pro Lys Ala
 195 200 205

His Val Ala His His Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys
 210 215 220

Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg
 225 230 235 240

Asp Gly Glu Glu Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro
 245 250 255

Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser
 260 265 270

Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro
 275 280 285

Gln Pro Leu Ile Leu Arg Trp Glu Gln Ser Pro Gln Pro Thr Ile Pro
 290 295 300

Ile Val Gly Ile Val Ala Gly Leu Val Val Leu Gly Ala Val Val Thr
 305 310 315 320

Gly Ala Val Val Ala Ala Val Met Trp Arg Lys Lys Ser Ser Asp Arg
 325 330 335

Asn Arg Gly Ser Tyr Ser Gln Ala Ala Val Thr Asp Ser Ala Gln Gly
 340 345 350

Ser Gly Val Ser Leu Thr Ala Asn Lys Val

355

360

<210> 2510

<211> 604

<212> PRT

<213> Homo sapiens

<400> 2510

Met Leu Ala Arg Ala Leu Leu Leu Cys Ala Val Leu Ala Leu Ser His
 1 5 10 15

Thr Ala Asn Pro Cys Cys Ser His Pro Cys Gln Asn Arg Gly Val Cys
 20 25 30

Met Ser Val Gly Phe Asp Gln Tyr Lys Cys Asp Cys Thr Arg Thr Gly
 35 40 45

Phe Tyr Gly Glu Asn Cys Ser Thr Pro Glu Phe Leu Thr Arg Ile Lys
 50 55 60

Leu Phe Leu Lys Pro Thr Pro Asn Thr Val His Tyr Ile Leu Thr His
 65 70 75 80

Phe Lys Gly Phe Trp Asn Val Val Asn Asn Ile Pro Phe Leu Arg Asn
 85 90 95

Ala Ile Met Ser Tyr Val Leu Thr Ser Arg Ser His Leu Ile Asp Ser
 100 105 110

Pro Pro Thr Tyr Asn Ala Asp Tyr Gly Tyr Lys Ser Trp Glu Ala Phe
 115 120 125

Ser Asn Leu Ser Tyr Tyr Thr Arg Ala Leu Pro Pro Val Pro Asp Asp
 130 135 140

Cys Pro Thr Pro Leu Gly Val Lys Gly Lys Lys Gln Leu Pro Asp Ser
 145 150 155 160

Asn Glu Ile Val Glu Lys Leu Leu Leu Arg Arg Lys Phe Ile Pro Asp
 165 170 175

Pro Gln Gly Ser Asn Met Met Phe Ala Phe Phe Ala Gln His Phe Thr
 180 185 190

His Gln Phe Phe Lys Thr Asp His Lys Arg Gly Pro Ala Phe Thr Asn
 195 200 205

Gly Leu Gly His Gly Val Asp Leu Asn His Ile Tyr Gly Glu Thr Leu
 210 215 220
 Ala Arg Gln Arg Lys Leu Arg Leu Phe Lys Asp Gly Lys Met Lys Tyr
 225 230 235 240
 Gln Ile Ile Asp Gly Glu Met Tyr Pro Pro Thr Val Lys Asp Thr Gln
 245 250 255
 Ala Glu Met Ile Tyr Pro Pro Gln Val Pro Glu His Leu Arg Phe Ala
 260 265 270
 Val Gly Gln Glu Val Phe Gly Leu Val Pro Gly Leu Met Met Tyr Ala
 275 280 285
 Thr Ile Trp Leu Arg Glu His Asn Arg Val Cys Asp Val Leu Lys Gln
 290 295 300
 Glu His Pro Glu Trp Gly Asp Glu Gln Leu Phe Gln Thr Ser Arg Leu
 305 310 315 320
 Ile Leu Ile Gly Glu Thr Ile Lys Ile Val Ile Glu Asp Tyr Val Gln
 325 330 335
 His Leu Ser Gly Tyr His Phe Lys Leu Lys Phe Asp Pro Glu Leu Leu
 340 345 350
 Phe Asn Lys Gln Phe Gln Tyr Gln Asn Arg Ile Ala Ala Glu Phe Asn
 355 360 365
 Thr Leu Tyr His Trp His Pro Leu Leu Pro Asp Thr Phe Gln Ile His
 370 375 380
 Asp Gln Lys Tyr Asn Tyr Gln Gln Phe Ile Tyr Asn Asn Ser Ile Leu
 385 390 395 400
 Leu Glu His Gly Ile Thr Gln Phe Val Glu Ser Phe Thr Arg Gln Ile
 405 410 415
 Ala Gly Arg Val Ala Gly Gly Arg Asn Val Pro Pro Ala Val Gln Lys
 420 425 430
 Val Ser Gln Ala Ser Ile Asp Gln Ser Arg Gln Met Lys Tyr Gln Ser
 435 440 445

Phe Asn Glu Tyr Arg Lys Arg Phe Met Leu Lys Pro Tyr Glu Ser Phe
 450 455 460

Glu Glu Leu Thr Gly Glu Lys Glu Met Ser Ala Glu Leu Glu Ala Leu
 465 470 475 480

Tyr Gly Asp Ile Asp Ala Val Glu Leu Tyr Pro Ala Leu Leu Val Glu
 485 490 495

Lys Pro Arg Pro Asp Ala Ile Phe Gly Glu Thr Met Val Glu Val Gly
 500 505 510

Ala Pro Phe Ser Leu Lys Gly Leu Met Gly Asn Val Ile Cys Ser Pro
 515 520 525

Ala Tyr Trp Lys Pro Ser Thr Phe Gly Gly Glu Val Gly Phe Gln Ile
 530 535 540

Ile Asn Thr Ala Ser Ile Gln Ser Leu Ile Cys Asn Asn Val Lys Gly
 545 550 555 560

Cys Pro Phe Thr Ser Phe Ser Val Pro Asp Pro Glu Leu Ile Lys Thr
 565 570 575

Val Thr Ile Asn Ala Ser Ser Ser Arg Ser Gly Leu Asp Asp Ile Asn
 580 585 590

Pro Thr Val Leu Leu Lys Glu Arg Ser Thr Glu Leu
 595 600

<210> 2511

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2511

Met Pro Leu Cys Ser Leu Leu Thr Cys Leu Gly Leu Asn Val Leu Phe
 1 5 10 15

Leu Thr Leu Asn Glu Gly Ala Trp Tyr Ser Val Gly Ala Leu Met Ile
 20 25 30

Ser Val Pro Ala Leu Leu Gly Tyr Leu Gln Glu Val Cys Arg Ala Arg
 35 40 45

Leu Pro Asp Ser Glu Leu Met Arg Arg Lys Tyr His Ser Val Arg Gln
 50 55 60

Glu Asp Leu Gln Arg Val Arg Leu Ser Arg Pro Glu Ala Val Ala Glu
65 70 75 80

Val Lys Ser Phe Leu Ile Gln Leu Glu Ala Phe Leu Ser Arg Leu Cys
85 90 95

Cys Thr Cys Glu Ala Ala Tyr Arg Val Leu His Trp Glu Asn Pro Val
100 105 110

Val Ser Ser Gln Phe Tyr Gly Ala Leu Leu Gly Thr Val Cys Met Leu
115 120 125

Tyr Leu Leu Pro Leu Cys Trp Val Leu Thr Leu Leu Asn Ser Thr Leu
130 135 140

Phe Leu Gly Asn Val Glu Phe Phe Arg Val Val Ser Glu Tyr Arg Ala
145 150 155 160

Ser Leu Gln Gln Arg Met Asn Pro Lys Gln Glu Glu His Ala Phe Glu
165 170 175

Ser Pro Pro Pro Asp Val Gly Gly Lys Asp Gly Leu Met Asp Ser
180 185 190

Thr Pro Ala Leu Thr Pro Thr Glu Asp Leu Thr Pro Gly Ser Val Glu
195 200 205

Glu Ala Glu Glu Ala Glu Pro Asp Glu Glu Phe Lys Asp Ala Ile Glu
210 215 220

Glu Thr His Leu Val Val Leu Glu Asp Asp Glu Gly Ala Pro Cys Pro
225 230 235 240

Ala Glu Asp Glu Leu Ala Leu Gln Asp Asn Gly Phe Leu Ser Lys Asn
245 250 255

Glu Val Leu Arg Ser Lys Val Ser Arg Leu Thr Glu Arg Leu Arg Lys
260 265 270

Arg Tyr Pro Thr Asn Asn Phe Gly Asn Cys Thr Gly Cys Ser Ala Thr
275 280 285

Phe Ser Val Leu Lys Lys Arg Arg Ser Cys Ser Asn Cys Gly Asn Ser
290 295 300

Phe Cys Ser Arg Cys Cys Ser Phe Lys Val Pro Lys Ser Ser Met Gly
 305 310 315 320

Ala Thr Ala Pro Glu Ala Gln Arg Glu Thr Val Phe Val Cys Ala Ser
 325 330 335

Cys Asn Gln Thr Leu Ser Lys
 340

<210> 2512

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2512

Met Lys Met Asp Met Glu Asp Ala Asp Met Thr Leu Trp Thr Glu Ala
 1 5 10 15

Glu Phe Glu Glu Lys Cys Thr Tyr Ile Val Asn Asp His Pro Trp Asp
 20 25 30

Ser Gly Ala Asp Gly Gly Thr Ser Val Gln Ala Glu Ala Ser Leu Pro
 35 40 45

Arg Asn Leu Leu Phe Lys Tyr Ala Thr Asn Ser Glu Glu Val Ile Gly
 50 55 60

Val Met Ser Lys Glu Tyr Ile Pro Lys Gly Thr Arg Phe Gly Pro Leu
 65 70 75 80

Ile Gly Glu Ile Tyr Thr Asn Asp Thr Val Pro Lys Asn Ala Asn Arg
 85 90 95

Lys Tyr Phe Trp Arg Ile Tyr Ser Arg Gly Glu Leu His His Phe Ile
 100 105 110

Asp Gly Phe Asn Glu Glu Lys Ser Asn Trp Met Arg Tyr Val Asn Pro
 115 120 125

Ala His Ser Pro Arg Glu Gln Asn Leu Ala Ala Cys Gln Asn Gly Met
 130 135 140

Asn Ile Tyr Phe Tyr Thr Ile Lys Pro Ile Pro Ala Asn Gln Glu Leu
 145 150 155 160

Leu Val Trp Tyr Cys Arg Asp Phe Ala Glu Arg Leu His Tyr Pro Tyr

165

170

175

Pro Gly Glu Leu Thr Met Met Asn Leu Thr Gln Thr Gln Ser Ser Leu
 180 185 190

Lys Gln Pro Ser Thr Glu Lys Asn Glu Leu Cys Pro Lys Asn Val Pro
 195 200 205

Lys Arg Glu Tyr Ser Val Lys Glu Ile Leu Lys Leu Asp Ser Asn Pro
 210 215 220

Ser Lys Gly Lys Asp Leu Tyr Arg Ser Asn Ile Ser Pro Leu Thr Ser
 225 230 235 240

Glu Lys Asp Leu Asp Asp Phe Arg Arg Arg Gly Ser Pro Glu Met Pro
 245 250 255

Phe Tyr Pro Arg Val Val Tyr Pro Ile Arg Ala Pro Leu Pro Glu Asp
 260 265 270

Phe Leu Lys Ala Ser Leu Ala Tyr Gly Ile Glu Arg Pro Thr Tyr Ile
 275 280 285

Thr Arg Ser Pro Ile Pro Ser Ser Thr Thr Pro Ser Pro Ser Ala Arg
 290 295 300

Ser Ser Pro Asp Gln Ser Leu Lys Ser Ser Ser Pro His Ser Ser Pro
 305 310 315 320

Gly Asn Thr Val Ser Pro Val Gly Pro Gly Ser Gln Glu His Arg Asp
 325 330 335

Ser Tyr Ala Tyr Leu Asn Ala Ser Tyr Gly Thr Glu Gly Leu Gly Ser
 340 345 350

Tyr Pro Gly Tyr Ala Pro Leu Pro His Leu Pro Pro Ala Phe Ile Pro
 355 360 365

Ser Tyr Asn Ala His Tyr Pro Lys Phe Leu Leu Pro Pro Tyr Gly Met
 370 375 380

Asn Cys Asn Gly Leu Ser Ala Val Ser Ser Met Asn Gly Ile Asn Asn
 385 390 395 400

Phe Gly Leu Phe Pro Arg Leu Cys Pro Val Tyr Ser Asn Leu Leu Gly
 405 410 415

Gly Gly Ser Leu Pro His Pro Met Leu Asn Pro Thr Ser Leu Pro Ser
 420 425 430

Ser Leu Pro Ser Asp Gly Ala Arg Arg Leu Leu Gln Pro Glu His Pro
 435 440 445

Arg Glu Val Leu Val Pro Ala Pro His Ser Ala Phe Ser Phe Thr Gly
 450 455 460

Ala Ala Ala Ser Met Lys Asp Lys Ala Cys Ser Pro Thr Ser Gly Ser
 465 470 475 480

Pro Thr Ala Gly Thr Ala Ala Thr Ala Glu His Val Val Gln Pro Lys
 485 490 495

Ala Thr Ser Ala Ala Met Ala Ala Pro Ser Ser Asp Glu Ala Met Asn
 500 505 510

Leu Ile Lys Asn Lys Arg Asn Met Thr Gly Tyr Lys Thr Leu Pro Tyr
 515 520 525

Pro Leu Lys Lys Gln Asn Gly Lys Ile Lys Tyr Glu Cys Asn Val Cys
 530 535 540

Ala Lys Thr Phe Gly Gln Leu Ser Asn Leu Lys Val His Leu Arg Val
 545 550 555 560

His Ser Gly Glu Arg Pro Phe Lys Cys Gln Thr Cys Asn Lys Gly Phe
 565 570 575

Thr Gln Leu Ala His Leu Gln Lys His Tyr Leu Val His Thr Gly Glu
 580 585 590

Lys Pro His Glu Cys Gln Val Cys His Lys Arg Phe Ser Ser Thr Ser
 595 600 605

Asn Leu Lys Thr His Leu Arg Leu His Ser Gly Glu Lys Pro Tyr Gln
 610 615 620

Cys Lys Val Cys Pro Ala Lys Phe Thr Gln Phe Val His Leu Lys Leu
 625 630 635 640

His Lys Arg Leu His Thr Arg Glu Arg Pro His Lys Cys Ser Gln Cys
 645 650 655

His Lys Asn Tyr Ile His Leu Cys Ser Leu Lys Val His Leu Lys Gly
 660 665 670

Asn Cys Ala Ala Ala Pro Ala Pro Gly Leu Pro Leu Glu Asp Leu Thr
 675 680 685

Arg Ile Asn Glu Glu Ile Glu Lys Phe Asp Ile Ser Asp Asn Ala Asp
 690 695 700

Arg Leu Glu Asp Val Glu Asp Asp Ile Ser Val Ile Ser Val Val Glu
 705 710 715 720

Lys Glu Ile Leu Ala Val Val Arg Lys Glu Lys Glu Glu Thr Gly Leu
 725 730 735

Lys Val Ser Leu Gln Arg Asn Met Gly Asn Gly Leu Leu Ser Ser Gly
 740 745 750

Cys Ser Leu Tyr Glu Ser Ser Asp Leu Pro Leu Met Lys Leu Pro Pro
 755 760 765

Ser Asn Pro Leu Pro Leu Val Pro Val Lys Val Lys Gln Glu Thr Val
 770 775 780

Glu Pro Met Asp Pro
 785

<210> 2513
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 2513

Met Pro Phe Ser Asn Ser His Asn Ala Leu Lys Leu Arg Phe Pro Ala
 1 5 10 15

Glu Asp Glu Phe Pro Asp Leu Ser Ala His Asn Asn His Met Ala Lys
 20 25 30

Val Leu Thr Pro Glu Leu Tyr Ala Glu Leu Arg Ala Lys Ser Thr Pro
 35 40 45

Ser Gly Phe Thr Leu Asp Asp Val Ile Gln Thr Gly Val Asp Asn Pro
 50 55 60

Gly His Pro Tyr Ile Met Thr Val Gly Cys Val Ala Gly Asp Glu Glu

65

70

75

80

Ser Tyr Glu Val Phe Lys Asp Leu Phe Asp Pro Ile Ile Glu Asp Arg
85 90 95

His Gly Gly Tyr Lys Pro Ser Asp Glu His Lys Thr Asp Leu Asn Pro
100 105 110

Asp Asn Leu Gln Gly Gly Asp Asp Leu Asp Pro Asn Tyr Val Leu Ser
115 120 125

Ser Arg Val Arg Thr Gly Arg Ser Ile Arg Gly Phe Cys Leu Pro Pro
130 135 140

His Cys Ser Arg Gly Glu Arg Arg Ala Ile Glu Lys Leu Ala Val Glu
145 150 155 160

Ala Leu Ser Ser Leu Asp Gly Asp Leu Ala Gly Arg Tyr Tyr Ala Leu
165 170 175

Lys Ser Met Thr Glu Ala Glu Gln Gln Gln Leu Ile Asp Asp His Phe
180 185 190

Leu Phe Asp Lys Pro Val Ser Pro Leu Leu Leu Ala Ser Gly Met Ala
195 200 205

Arg Asp Trp Pro Asp Ala Arg Gly Ile Trp His Asn Asp Asn Lys Thr
210 215 220

Phe Leu Val Trp Val Asn Glu Glu Asp His Leu Arg Val Ile Ser Met
225 230 235 240

Gln Lys Gly Gly Asn Met Lys Glu Val Phe Thr Arg Phe Cys Thr Gly
245 250 255

Leu Thr Gln Ile Glu Thr Leu Phe Lys Ser Lys Asp Tyr Glu Phe Met
260 265 270

Trp Asn Pro His Leu Gly Tyr Ile Leu Thr Cys Pro Ser Asn Leu Gly
275 280 285

Thr Gly Leu Arg Ala Gly Val His Ile Lys Leu Pro Asn Leu Gly Lys
290 295 300

His Glu Lys Phe Ser Glu Val Leu Lys Arg Leu Arg Leu Gln Lys Arg
305 310 315 320

Gly Thr Gly Gly Val Asp Thr Ala Ala Val Gly Gly Val Phe Asp Val
 325 330 335

Ser Asn Ala Asp Arg Leu Gly Phe Ser Glu Val Glu Leu Val Gln Met
 340 345 350

Val Val Asp Gly Val Lys Leu Leu Ile Glu Met Glu Gln Arg Leu Glu
 355 360 365

Gln Gly Gln Ala Ile Asp Asp Leu Met Pro Ala Gln Lys
 370 375 380

<210> 2514

<211> 541

<212> PRT

<213> Homo sapiens

<400> 2514

Met Thr Thr Pro Ala Gly Ser Gly Ser Gly Phe Gly Ser Val Ser Trp
 1 5 10 15

Trp Gly Leu Ser Pro Ala Leu Asp Leu Gln Ala Glu Ser Pro Val
 20 25 30

Asp Pro Asp Ser Gln Ala Asp Thr Val His Ser Asn Pro Glu Leu Asp
 35 40 45

Val Leu Leu Leu Gly Ser Val Asp Gly Arg His Leu Leu Arg Thr Leu
 50 55 60

Ser Arg Ala Lys Phe Trp Pro Arg Arg Arg Phe Asn Phe Phe Val Leu
 65 70 75 80

Glu Asn Asn Leu Glu Ala Val Ala Arg His Met Leu Ile Phe Ser Leu
 85 90 95

Ala Leu Glu Glu Pro Glu Lys Met Gly Leu Gln Glu Arg Ser Glu Thr
 100 105 110

Phe Leu Glu Val Trp Gly Asn Ala Leu Leu Arg Pro Pro Val Ala Ala
 115 120 125

Phe Val Arg Ala Gln Ala Asp Leu Leu Ala His Leu Val Pro Glu Pro
 130 135 140

Asp Arg Leu Glu Glu Gln Leu Pro Trp Leu Ser Leu Arg Ala Leu Lys
 145 150 155 160

Phe Arg Glu Arg Asp Ala Leu Glu Ala Val Phe Arg Phe Trp Ala Gly
 165 170 175

Gly Glu Lys Gly Pro Gln Ala Phe Pro Met Ser Arg Leu Trp Asp Ser
 180 185 190

Arg Leu Arg His Tyr Leu Gly Ser Arg Tyr Asp Ala Arg Arg Gly Val
 195 200 205

Ser Asp Trp Asp Leu Arg Met Lys Leu His Asp Arg Gly Ala Gln Val
 210 215 220

Ile His Pro Gln Glu Phe Arg Arg Trp Arg Asp Thr Gly Val Ala Phe
 225 230 235 240

Glu Leu Arg Asp Ser Ser Ala Tyr His Val Pro Asn Arg Thr Leu Ala
 245 250 255

Ser Gly Arg Leu Leu Ser Tyr Arg Gly Glu Arg Val Ala Ala Arg Gly
 260 265 270

Tyr Trp Gly Asp Ile Ala Thr Gly Pro Phe Val Ala Phe Gly Ile Glu
 275 280 285

Ala Asp Asp Glu Ser Leu Leu Arg Thr Ser Asn Gly Gln Pro Val Lys
 290 295 300

Thr Ala Gly Glu Ile Thr Gln His Asn Val Thr Glu Leu Leu Arg Asp
 305 310 315 320

Val Ala Ala Trp Gly Arg Ala Arg Ala Thr Gly Gly Asp Leu Glu Gly
 325 330 335

Gln Gln His Ala Glu Gly Ser Pro Glu Pro Gly Thr Pro Ala Ala Pro
 340 345 350

Thr Pro Glu Ser Phe Thr Val His Phe Leu Pro Leu Asn Ser Ala Gln
 355 360 365

Thr Leu His His Lys Ser Cys Tyr Asn Gly Arg Phe Gln Leu Leu Tyr
 370 375 380

Val Ala Cys Gly Met Val His Leu Leu Ile Pro Glu Leu Gly Ala Cys

385 390 395 400

Val Ala Pro Gly Gly Asn Leu Ile Val Glu Leu Ala Arg Tyr Leu Val
 405 410 415

Asp Val Arg Gln Glu Gln Leu Gln Gly Phe Asn Thr Arg Val Arg Glu
 420 425 430

Leu Ala Gln Ala Ala Gly Phe Ala Pro Gln Thr Gly Ala Arg Pro Ser
 435 440 445

Glu Thr Phe Ala Arg Phe Cys Lys Ser Gln Glu Ser Ala Leu Gly Asn
 450 455 460

Thr Val Pro Ala Val Glu Pro Gly Thr Pro Pro Leu Asp Ile Leu Ala
465 470 475 480

Gln Pro Leu Glu Ala Ser Asn Pro Ala Leu Glu Gly Leu Thr Gln Pro
 485 490 495

Leu Gln Gly Gly Thr Pro His Cys Glu Pro Cys Gln Leu Pro Ser Glu
 500 505 510

Ser Pro Gly Ser Leu Ser Glu Val Leu Ala Gln Pro Gln Gly Ala Leu
 515 520 525

Ala Pro Pro Asn Cys Glu Ser Asp Ser Lys Thr Gly Val
 530 535 540

<210> 2515
<211> 288
<212> PRT
<213> Homo sapiens

<400> 2515

Met Ser Asp Ile Glu Glu Val Val Glu Glu Tyr Glu Glu Glu Glu Gln
1 5 10 15

Glu Glu Ala Ala Val Glu Glu Gln Glu Glu Ala Ala Glu Glu Asp Ala
 20 25 30

Glu Ala Glu Ala Glu Thr Glu Glu Thr Arg Ala Glu Glu Asp Glu Glu
 35 40 45

Glu Glu Glu Ala Lys Glu Ala Glu Asp Gly Pro Met Glu Glu Ser Lys
50 55 60

Pro Lys Pro Arg Ser Phe Met Pro Asn Leu Val Pro Pro Lys Ile Pro
 65 70 75 80

Asp Gly Glu Arg Val Asp Phe Asp Asp Ile His Arg Lys Arg Met Glu
 85 90 95

Lys Asp Leu Asn Glu Leu Gln Ala Leu Ile Glu Ala His Phe Glu Asn
 100 105 110

Arg Lys Lys Glu Glu Glu Glu Leu Val Ser Leu Lys Asp Arg Ile Glu
 115 120 125

Arg Arg Arg Ala Glu Arg Ala Glu Gln Gln Arg Ile Arg Asn Glu Arg
 130 135 140

Glu Lys Glu Arg Gln Asn Arg Leu Ala Glu Glu Arg Ala Arg Arg Glu
 145 150 155 160

Glu Glu Glu Asn Arg Arg Lys Ala Glu Asp Glu Ala Arg Lys Lys Lys
 165 170 175

Ala Leu Ser Asn Met Met His Phe Gly Gly Tyr Ile Gln Lys Gln Ala
 180 185 190

Gln Thr Glu Arg Lys Ser Gly Lys Arg Gln Thr Glu Arg Glu Lys Lys
 195 200 205

Lys Lys Ile Leu Ala Glu Arg Arg Lys Val Leu Ala Ile Asp His Leu
 210 215 220

Asn Glu Asp Gln Leu Arg Glu Lys Ala Lys Glu Leu Trp Gln Ser Ile
 225 230 235 240

Tyr Asn Leu Glu Ala Glu Lys Phe Asp Leu Gln Glu Lys Phe Lys Gln
 245 250 255

Gln Lys Tyr Glu Ile Asn Val Leu Arg Asn Arg Ile Asn Asp Asn Gln
 260 265 270

Lys Val Ser Lys Thr Arg Gly Lys Ala Lys Val Thr Gly Arg Trp Lys
 275 280 285

<210> 2516
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2516

Met Gly Leu Ser Asp Gly Glu Trp Gln Leu Val Leu Asn Val Trp Gly
 1 5 10 15

Lys Val Glu Ala Asp Ile Pro Gly His Gly Gln Glu Val Leu Ile Arg
 20 25 30

Leu Phe Lys Gly His Pro Glu Thr Leu Glu Lys Phe Asp Lys Phe Lys
 35 40 45

His Leu Lys Ser Glu Asp Glu Met Lys Ala Ser Glu Asp Leu Lys Lys
 50 55 60

His Gly Ala Thr Val Leu Thr Ala Leu Gly Gly Ile Leu Lys Lys Lys
 65 70 75 80

Gly His His Glu Ala Glu Ile Lys Pro Leu Ala Gln Ser His Ala Thr
 85 90 95

Lys His Lys Ile Pro Val Lys Tyr Leu Glu Phe Ile Ser Glu Cys Ile
 100 105 110

Ile Gln Val Leu Gln Ser Lys His Pro Gly Asp Phe Gly Ala Asp Ala
 115 120 125

Gln Gly Ala Met Asn Lys Ala Leu Glu Leu Phe Arg Lys Asp Met Ala
 130 135 140

Ser Asn Tyr Lys Glu Leu Gly Phe Gln Gly
 145 150

<210> 2517

<211> 501

<212> PRT

<213> Homo sapiens

<400> 2517

Met Val Arg Lys Pro Val Val Ser Thr Ile Ser Lys Gly Gly Tyr Leu
 1 5 10 15

Gln Gly Asn Val Asn Gly Arg Leu Pro Ser Leu Gly Asn Lys Glu Pro
 20 25 30

Pro Gly Gln Glu Lys Val Gln Leu Lys Arg Lys Val Thr Leu Leu Arg
 35 40 45

Gly Val Ser Ile Ile Ile Gly Thr Ile Ile Gly Ala Gly Ile Phe Ile
 50 55 60

Ser Pro Lys Gly Val Leu Gln Asn Thr Gly Ser Val Gly Met Ser Leu
 65 70 75 80

Thr Ile Trp Thr Val Cys Gly Val Leu Ser Leu Phe Gly Ala Leu Ser
 85 90 95

Tyr Ala Glu Leu Gly Thr Thr Ile Lys Lys Ser Gly Gly His Tyr Thr
 100 105 110

Tyr Ile Leu Glu Val Phe Gly Pro Leu Pro Ala Phe Val Arg Val Trp
 115 120 125

Val Glu Leu Leu Ile Ile Arg Pro Ala Ala Thr Ala Val Ile Ser Leu
 130 135 140

Ala Phe Gly Arg Tyr Ile Leu Glu Pro Phe Phe Ile Gln Cys Glu Ile
 145 150 155 160

Pro Glu Leu Ala Ile Lys Leu Ile Thr Ala Val Gly Ile Thr Val Val
 165 170 175

Met Val Leu Asn Ser Met Ser Val Ser Trp Ser Ala Arg Ile Gln Ile
 180 185 190

Phe Leu Thr Phe Cys Lys Leu Thr Ala Ile Leu Ile Ile Ile Val Pro
 195 200 205

Gly Val Met Gln Leu Ile Lys Gly Gln Thr Gln Asn Phe Lys Asp Ala
 210 215 220

Phe Ser Gly Arg Asp Ser Ser Ile Thr Arg Leu Pro Leu Ala Phe Tyr
 225 230 235 240

Tyr Gly Met Tyr Ala Tyr Ala Gly Trp Phe Tyr Leu Asn Phe Val Thr
 245 250 255

Glu Glu Val Glu Asn Pro Glu Lys Thr Ile Pro Leu Ala Ile Cys Ile
 260 265 270

Ser Met Ala Ile Val Thr Ile Gly Tyr Val Leu Thr Asn Val Ala Tyr
 275 280 285

Phe Thr Thr Ile Asn Ala Glu Glu Leu Leu Leu Ser Asn Ala Val Ala
 290 295 300
 Val Thr Phe Ser Glu Arg Leu Leu Gly Asn Phe Ser Leu Ala Val Pro
 305 310 315 320
 Ile Phe Val Ala Leu Ser Cys Phe Gly Ser Met Asn Gly Gly Val Phe
 325 330 335
 Ala Val Ser Arg Leu Phe Tyr Val Ala Ser Arg Glu Gly His Leu Pro
 340 345 350
 Glu Ile Leu Ser Met Ile His Val Arg Lys His Thr Pro Leu Pro Ala
 355 360 365
 Val Ile Val Leu His Pro Leu Thr Met Ile Met Leu Phe Ser Gly Asp
 370 375 380
 Leu Asp Ser Leu Leu Asn Phe Leu Ser Phe Ala Arg Trp Leu Phe Ile
 385 390 395 400
 Gly Leu Ala Val Ala Gly Leu Ile Tyr Leu Arg Tyr Lys Cys Pro Asp
 405 410 415
 Met His Arg Pro Phe Lys Val Pro Leu Phe Ile Pro Ala Leu Phe Ser
 420 425 430
 Phe Thr Cys Leu Phe Met Val Ala Leu Ser Leu Tyr Ser Asp Pro Phe
 435 440 445
 Ser Thr Gly Ile Gly Phe Val Ile Thr Leu Thr Gly Val Pro Ala Tyr
 450 455 460
 Tyr Leu Phe Ile Ile Trp Asp Lys Lys Pro Arg Trp Phe Arg Ile Met
 465 470 475 480
 Ser Glu Lys Ile Thr Arg Thr Leu Gln Ile Ile Leu Glu Val Val Pro
 485 490 495
 Glu Glu Asp Lys Leu
 500
 <210> 2518
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 2518

Met Val Arg Leu Pro Leu Gln Cys Val Leu Trp Gly Cys Leu Leu Thr
 1 5 10 15

Ala Val His Pro Glu Pro Pro Thr Ala Cys Arg Glu Lys Gln Tyr Leu
 20 25 30

Ile Asn Ser Gln Cys Cys Ser Leu Cys Gln Pro Gly Gln Lys Leu Val
 35 40 45

Ser Asp Cys Thr Glu Phe Thr Glu Thr Glu Cys Leu Pro Cys Gly Glu
 50 55 60

Ser Glu Phe Leu Asp Thr Trp Asn Arg Glu Thr His Cys His Gln His
 65 70 75 80

Lys Tyr Cys Asp Pro Asn Leu Gly Leu Arg Val Gln Gln Lys Gly Thr
 85 90 95

Ser Glu Thr Asp Thr Ile Cys Thr Cys Glu Glu Gly Trp His Cys Thr
 100 105 110

Ser Glu Ala Cys Glu Ser Cys Val Leu His Arg Ser Cys Ser Pro Gly
 115 120 125

Phe Gly Val Lys Gln Ile Ala Thr Gly Val Ser Asp Thr Ile Cys Glu
 130 135 140

Pro Cys Pro Val Gly Phe Phe Ser Asn Val Ser Ser Ala Phe Glu Lys
 145 150 155 160

Cys His Pro Trp Thr Ser Cys Glu Thr Lys Asp Leu Val Val Gln Gln
 165 170 175

Ala Gly Thr Asn Lys Thr Asp Val Val Cys Gly Pro Gln Asp Arg Leu
 180 185 190

Arg Ala Leu Val Val Ile Pro Ile Ile Phe Gly Ile Leu Phe Ala Ile
 195 200 205

Leu Leu Val Leu Val Phe Ile Lys Lys Val Ala Lys Lys Pro Thr Asn
 210 215 220

Lys Ala Pro His Pro Lys Gln Glu Pro Gln Glu Ile Asn Phe Pro Asp
 225 230 235 240

Asp Leu Pro Gly Ser Asn Thr Ala Ala Pro Val Gln Glu Thr Leu His
245 250 255

Gly Cys Gln Pro Val Thr Gln Glu Asp Gly Lys Glu Ser Arg Ile Ser
260 265 270

Val Gln Glu Arg Gln
275

<210> 2519

<211> 260

<212> PRT

<213> Homo sapiens

<400> 2519

Met Ala Arg Pro His Pro Trp Trp Leu Cys Val Leu Gly Thr Leu Val
1 5 10 15

Gly Leu Ser Ala Thr Pro Ala Pro Lys Ser Cys Pro Glu Arg His Tyr
20 25 30

Trp Ala Gln Gly Lys Leu Cys Cys Gln Met Cys Glu Pro Gly Thr Phe
35 40 45

Leu Val Lys Asp Cys Asp Gln His Arg Lys Ala Ala Gln Cys Asp Pro
50 55 60

Cys Ile Pro Gly Val Ser Phe Ser Pro Asp His His Thr Arg Pro His
65 70 75 80

Cys Glu Ser Cys Arg His Cys Asn Ser Gly Leu Leu Val Arg Asn Cys
85 90 95

Thr Ile Thr Ala Asn Ala Glu Cys Ala Cys Arg Asn Gly Trp Gln Cys
100 105 110

Arg Asp Lys Glu Cys Thr Glu Cys Asp Pro Leu Pro Asn Pro Ser Leu
115 120 125

Thr Ala Arg Ser Ser Gln Ala Leu Ser Pro His Pro Gln Pro Thr His
130 135 140

Leu Pro Tyr Val Ser Glu Met Leu Glu Ala Arg Thr Ala Gly His Met
145 150 155 160

Gln Thr Leu Ala Asp Phe Arg Gln Leu Pro Ala Arg Thr Leu Ser Thr

165

170

175

His Trp Pro Pro Gln Arg Ser Leu Cys Ser Ser Asp Phe Ile Arg Ile
 180 185 190

Leu Val Ile Phe Ser Gly Met Phe Leu Val Phe Thr Leu Ala Gly Ala
 195 200 205

Leu Phe Leu His Gln Arg Arg Lys Tyr Arg Ser Asn Lys Gly Glu Ser
 210 215 220

Pro Val Glu Pro Ala Glu Pro Cys Arg Tyr Ser Cys Pro Arg Glu Glu
 225 230 235 240

Glu Gly Ser Thr Ile Pro Ile Gln Glu Asp Tyr Arg Lys Pro Glu Pro
 245 250 255

Ala Cys Ser Pro
 260

<210> 2520

<211> 329

<212> PRT

<213> Homo sapiens

<400> 2520

Met Asp Pro Gln Cys Thr Met Gly Leu Ser Asn Ile Leu Phe Val Met
 1 5 10 15

Ala Phe Leu Leu Ser Gly Ala Ala Pro Leu Lys Ile Gln Ala Tyr Phe
 20 25 30

Asn Glu Thr Ala Asp Leu Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln
 35 40 45

Ser Leu Ser Glu Leu Val Val Phe Trp Gln Asp Gln Glu Asn Leu Val
 50 55 60

Leu Asn Glu Val Tyr Leu Gly Lys Glu Lys Phe Asp Ser Val His Ser
 65 70 75 80

Lys Tyr Met Gly Arg Thr Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg
 85 90 95

Leu His Asn Leu Gln Ile Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile
 100 105 110

His His Lys Lys Pro Thr Gly Met Ile Arg Ile His Gln Met Asn Ser
 115 120 125

Glu Leu Ser Val Leu Ala Asn Phe Ser Gln Pro Glu Ile Val Pro Ile
 130 135 140

Ser Asn Ile Thr Glu Asn Val Tyr Ile Asn Leu Thr Cys Ser Ser Ile
 145 150 155 160

His Gly Tyr Pro Glu Pro Lys Lys Met Ser Val Leu Leu Arg Thr Lys
 165 170 175

Asn Ser Thr Ile Glu Tyr Asp Gly Ile Met Gln Lys Ser Gln Asp Asn
 180 185 190

Val Thr Glu Leu Tyr Asp Val Ser Ile Ser Leu Ser Val Ser Phe Pro
 195 200 205

Asp Val Thr Ser Asn Met Thr Ile Phe Cys Ile Leu Glu Thr Asp Lys
 210 215 220

Thr Arg Leu Leu Ser Ser Pro Phe Ser Ile Glu Leu Glu Asp Pro Gln
 225 230 235 240

Pro Pro Pro Asp His Ile Pro Trp Ile Thr Ala Val Leu Pro Thr Val
 245 250 255

Ile Ile Cys Val Met Val Phe Cys Leu Ile Leu Trp Lys Trp Lys Lys
 260 265 270

Lys Lys Arg Pro Arg Asn Ser Tyr Lys Cys Gly Thr Asn Thr Met Glu
 275 280 285

Arg Glu Glu Ser Glu Gln Thr Lys Lys Arg Glu Lys Ile His Ile Pro
 290 295 300

Glu Arg Ser Asp Glu Ala Gln Arg Val Phe Lys Ser Ser Lys Thr Ser
 305 310 315 320

Ser Cys Asp Lys Ser Asp Thr Cys Phe
 325

<210> 2521
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 2521

Met Glu Phe Asp Leu Asn Gly Asn Gly Asp Ile Gly Glu Lys Arg Val
 1 5 10 15

Ile Cys Gly Gly Arg Val Val Cys Arg Pro Lys Lys Thr Glu Val Ser
 20 25 30

Pro Thr Cys Ser Ile Pro His Asp Leu Gly Gly Gly Pro Pro Thr Thr
 35 40 45

Val Gly Gly Arg Arg Met Gly Met Arg Lys Trp Glu Arg Arg Glu Arg
 50 55 60

Val Ser Pro Pro Ser Pro His Pro His Pro Leu Pro Pro Asp Ile Met
 65 70 75 80

Ser Leu Lys Arg Met Leu Glu Lys Leu Gly Val Pro Lys Thr His Leu
 85 90 95

Glu Leu Lys Lys Leu Ile Gly Glu Val Ser Ser Gly Ser Gly Glu Thr
 100 105 110

Phe Ser Tyr Pro Asp Phe Leu Arg Met Met Leu Gly Lys Arg Ser Ala
 115 120 125

Ile Leu Lys Met
 130

<210> 2522

<211> 491

<212> PRT

<213> Homo sapiens

<400> 2522

Met Glu Ser Ser Ala Lys Arg Lys Met Asp Pro Asp Asn Pro Asp Glu
 1 5 10 15

Gly Pro Ser Ser Lys Val Pro Arg Pro Glu Thr Pro Val Thr Lys Ala
 20 25 30

Thr Thr Phe Leu Gln Thr Met Leu Arg Lys Glu Val Asn Ser Gln Leu
 35 40 45

Ser Leu Gly Asp Pro Leu Phe Pro Glu Leu Ala Glu Glu Ser Leu Lys
 50 55 60

Thr Phe Glu Gln Val Thr Glu Asp Cys Asn Glu Asn Pro Glu Lys Asp
 65 70 75 80

Val Leu Ala Glu Leu Val Lys Gln Ile Lys Val Arg Val Asp Met Val
 85 90 95

Arg His Arg Ile Lys Glu His Met Leu Lys Lys Tyr Thr Gln Thr Glu
 100 105 110

Glu Lys Phe Thr Gly Ala Phe Asn Met Met Gly Gly Cys Leu Gln Asn
 115 120 125

Ala Leu Asp Ile Leu Asp Lys Val His Glu Pro Phe Glu Glu Met Lys
 130 135 140

Cys Ile Gly Leu Thr Met Gln Ser Met Tyr Glu Asn Tyr Ile Val Pro
 145 150 155 160

Glu Asp Lys Arg Glu Met Trp Met Ala Cys Ile Lys Glu Leu His Asp
 165 170 175

Val Ser Lys Gly Ala Ala Asn Lys Leu Gly Gly Ala Leu Gln Ala Lys
 180 185 190

Ala Arg Ala Lys Lys Asp Glu Leu Arg Arg Lys Met Met Tyr Met Cys
 195 200 205

Tyr Arg Asn Ile Glu Phe Phe Thr Lys Asn Ser Ala Phe Pro Lys Thr
 210 215 220

Thr Asn Gly Cys Ser Gln Ala Met Ala Ala Leu Gln Asn Leu Pro Gln
 225 230 235 240

Cys Ser Pro Asp Glu Ile Met Ala Tyr Ala Gln Lys Ile Phe Lys Ile
 245 250 255

Leu Asp Glu Glu Arg Asp Lys Val Leu Thr His Ile Asp His Ile Phe
 260 265 270

Met Asp Ile Leu Thr Thr Cys Val Glu Thr Met Cys Asn Glu Tyr Lys
 275 280 285

Val Thr Ser Asp Ala Cys Met Met Thr Met Tyr Gly Gly Ile Ser Leu
 290 295 300

Leu Ser Glu Phe Cys Arg Val Leu Cys Cys Tyr Val Leu Glu Glu Thr
 305 310 315 320

Ser Val Met Leu Ala Lys Arg Pro Leu Ile Thr Lys Pro Glu Val Ile
 325 330 335

Ser Val Met Lys Arg Arg Ile Glu Glu Ile Cys Met Lys Val Phe Ala
 340 345 350

Gln Tyr Ile Leu Gly Ala Asp Pro Leu Arg Val Cys Ser Pro Ser Val
 355 360 365

Asp Asp Leu Arg Ala Ile Ala Glu Glu Ser Asp Glu Glu Glu Ala Ile
 370 375 380

Val Ala Tyr Thr Leu Ala Thr Ala Gly Val Ser Ser Ser Asp Ser Leu
 385 390 395 400

Val Ser Pro Pro Glu Ser Pro Val Pro Ala Thr Ile Pro Leu Ser Ser
 405 410 415

Val Ile Val Ala Glu Asn Ser Asp Gln Glu Glu Ser Glu Gln Ser Asp
 420 425 430

Glu Glu Glu Glu Glu Gly Ala Gln Glu Glu Arg Glu Asp Thr Val Ser
 435 440 445

Val Lys Ser Glu Pro Val Ser Glu Ile Glu Glu Val Ala Pro Glu Glu
 450 455 460

Glu Glu Asp Gly Ala Glu Glu Pro Thr Ala Ser Gly Gly Lys Ser Thr
 465 470 475 480

His Pro Met Val Thr Arg Ser Lys Ala Asp Gln
 485 490

<210> 2523

<211> 491

<212> PRT

<213> Homo sapiens

<400> 2523

Met Glu Ser Ser Ala Lys Arg Lys Met Asp Pro Asp Asn Pro Asp Glu
 1 5 10 15

Gly Pro Ser Ser Lys Val Pro Arg Pro Glu Thr Pro Val Thr Lys Ala
 20 25 30

Thr Thr Phe Leu Gln Thr Met Leu Arg Lys Glu Val Asn Ser Gln Leu
 35 40 45
 Ser Leu Gly Asp Pro Leu Phe Pro Glu Leu Ala Glu Glu Ser Leu Lys
 50 55 60
 Thr Phe Glu Gln Val Thr Glu Asp Cys Asn Glu Asn Pro Glu Lys Asp
 65 70 75 80
 Val Leu Ala Glu Leu Val Lys Gln Ile Lys Val Arg Val Asp Met Val
 85 90 95
 Arg His Arg Ile Lys Glu His Met Leu Lys Lys Tyr Thr Gln Thr Glu
 100 105 110
 Glu Lys Phe Thr Gly Ala Phe Asn Met Met Gly Gly Cys Leu Gln Asn
 115 120 125
 Ala Leu Asp Ile Leu Asp Lys Val His Glu Pro Phe Glu Glu Met Lys
 130 135 140
 Cys Ile Gly Leu Thr Met Gln Ser Met Tyr Glu Asn Tyr Ile Val Pro
 145 150 155 160
 Glu Asp Lys Arg Glu Met Trp Met Ala Cys Ile Lys Glu Leu His Asp
 165 170 175
 Val Ser Lys Gly Ala Ala Asn Lys Leu Gly Gly Ala Leu Gln Ala Lys
 180 185 190
 Ala Arg Ala Lys Lys Asp Glu Leu Arg Arg Lys Met Met Tyr Met Cys
 195 200 205
 Tyr Arg Asn Ile Glu Phe Phe Thr Lys Asn Ser Ala Phe Pro Lys Thr
 210 215 220
 Thr Asn Gly Cys Ser Gln Ala Met Ala Ala Leu Gln Asn Leu Pro Gln
 225 230 235 240
 Cys Ser Pro Asp Glu Ile Met Ala Tyr Ala Gln Lys Ile Phe Lys Ile
 245 250 255
 Leu Asp Glu Glu Arg Asp Lys Val Leu Thr His Ile Asp His Ile Phe
 260 265 270

Met Asp Ile Leu Thr Thr Cys Val Glu Thr Met Cys Asn Glu Tyr Lys
275 280 285

Val Thr Ser Asp Ala Cys Met Met Thr Met Tyr Gly Gly Ile Ser Leu
290 295 300

Leu Ser Glu Phe Cys Arg Val Leu Cys Cys Tyr Val Leu Glu Glu Thr
305 310 315 320

Ser Val Met Leu Ala Lys Arg Pro Leu Ile Thr Lys Pro Glu Val Ile
325 330 335

Ser Val Met Lys Arg Arg Ile Glu Glu Ile Cys Met Lys Val Phe Ala
340 345 350

Gln Tyr Ile Leu Gly Ala Asp Pro Leu Arg Val Cys Ser Pro Ser Val
355 360 365

Asp Asp Leu Arg Ala Ile Ala Glu Glu Ser Asp Glu Glu Ala Ile
370 375 380

Val Ala Tyr Thr Leu Ala Thr Ala Gly Val Ser Ser Ser Asp Ser Leu
385 390 395 400

Val Ser Pro Pro Glu Ser Pro Val Pro Ala Thr Ile Pro Leu Ser Ser
405 410 415

Val Ile Val Ala Glu Asn Ser Asp Gln Glu Glu Ser Glu Gln Ser Asp
420 425 430

Glu Glu Glu Glu Glu Gly Ala Gln Glu Glu Arg Glu Asp Thr Val Ser
435 440 445

Val Lys Ser Glu Pro Val Ser Glu Ile Glu Glu Val Ala Pro Glu Glu
450 455 460

Glu Glu Asp Gly Ala Glu Glu Pro Thr Ala Ser Gly Gly Lys Ser Thr
465 470 475 480

His Pro Met Val Thr Arg Ser Lys Ala Asp Gln
485 490

<210> 2524
<211> 641
<212> PRT
<213> Homo sapiens

<400> 2524

Met Ser Asp Glu Gly Pro Gly Thr Gly Pro Gly Asn Gly Leu Gly Glu
 1 5 10 15

Lys Gly Asp Thr Ser Gly Pro Glu Gly Ser Gly Gly Ser Gly Pro Gln
 20 25 30

Arg Arg Gly Gly Asp Asn His Gly Arg Gly Arg Gly Arg Gly Arg Gly
 35 40 45

Arg Gly Gly Gly Arg Pro Gly Ala Pro Gly Gly Ser Gly Ser Gly Pro
 50 55 60

Arg His Arg Asp Gly Val Arg Arg Pro Gln Lys Arg Pro Ser Cys Ile
 65 70 75 80

Gly Cys Lys Gly Thr His Gly Gly Thr Gly Ala Gly Ala Gly Ala Gly
 85 90 95

Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Gly Ala Gly Ala Gly
 100 105 110

Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly
 115 120 125

Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala
 130 135 140

Gly Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly
 145 150 155 160

Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Gly Gly Gly Ala Gly
 165 170 175

Ala Gly Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly
 180 185 190

Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly Gly Ala Gly
 195 200 205

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala
 210 215 220

Gly Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala
 225 230 235 240

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
 245 250 255

Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly
 260 265 270

Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly Ala Gly
 275 280 285

Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Ala Gly Gly Ala Gly
 290 295 300

Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly
 305 310 315 320

Gly Ala Gly Ala Gly Gly Gly Gly Arg Gly Arg Gly Gly Ser Gly Gly
 325 330 335

Arg Gly Arg Gly Gly Ser Gly Gly Arg Gly Arg Gly Gly Ser Gly Gly
 340 345 350

Arg Arg Gly Arg Gly Arg Glu Arg Ala Arg Gly Gly Ser Arg Glu Arg
 355 360 365

Ala Arg Gly Arg Gly Arg Gly Arg Gly Glu Lys Arg Pro Arg Ser Pro
 370 375 380

Ser Ser Gln Ser Ser Ser Ser Gly Ser Pro Pro Arg Arg Pro Pro Pro
 385 390 395 400

Gly Arg Arg Pro Phe Phe His Pro Val Gly Glu Ala Asp Tyr Phe Glu
 405 410 415

Tyr His Gln Glu Gly Gly Pro Asp Gly Glu Pro Asp Val Pro Pro Gly
 420 425 430

Ala Ile Glu Gln Gly Pro Ala Asp Asp Pro Gly Glu Gly Pro Ser Thr
 435 440 445

Gly Pro Arg Gly Gln Gly Asp Gly Gly Arg Arg Lys Lys Gly Gly Trp
 450 455 460

Phe Gly Lys His Arg Gly Gln Gly Gly Ser Asn Pro Lys Phe Glu Asn
 465 470 475 480

Ile Ala Glu Gly Leu Arg Ala Leu Leu Ala Arg Ser His Val Glu Arg
 485 490 495

Thr Thr Asp Glu Gly Thr Trp Val Ala Gly Val Phe Val Tyr Gly Gly
 500 505 510

Ser Lys Thr Ser Leu Tyr Asn Leu Arg Arg Gly Thr Ala Leu Ala Ile
 515 520 525

Pro Gln Cys Arg Leu Thr Pro Leu Ser Arg Leu Pro Phe Gly Met Ala
 530 535 540

Pro Gly Pro Gly Pro Gln Pro Gly Pro Leu Arg Glu Ser Ile Val Cys
 545 550 555 560

Tyr Phe Met Val Phe Leu Gln Thr His Ile Phe Ala Glu Val Leu Lys
 565 570 575

Asp Ala Ile Lys Asp Leu Val Met Thr Lys Pro Ala Pro Thr Cys Asn
 580 585 590

Ile Arg Val Thr Val Cys Ser Phe Asp Asp Gly Val Asp Leu Pro Pro
 595 600 605

Trp Phe Pro Pro Met Val Glu Gly Ala Ala Ala Glu Gly Asp Asp Gly
 610 615 620

Asp Asp Gly Asp Glu Gly Gly Asp Gly Asp Glu Gly Glu Glu Gly Gln
 625 630 635 640

Glu

<210> 2525
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 2525

Met Met Asp Pro Asn Ser Thr Ser Glu Asp Val Lys Phe Thr Pro Asp
 1 5 10 15

Pro Tyr Gln Val Pro Phe Val Gln Ala Phe Asp Gln Ala Thr Arg Val
 20 25 30

Tyr Gln Asp Leu Gly Gly Pro Ser Gln Ala Pro Leu Pro Cys Val Leu

35

40

45

Trp Pro Val Leu Pro Glu Pro Leu Pro Gln Gly Gln Leu Thr Ala Tyr
 50 55 60

His Val Ser Thr Ala Pro Thr Gly Ser Trp Phe Ser Ala Pro Gln Pro
 65 70 75 80

Ala Pro Glu Asn Ala Tyr Gln Ala Tyr Ala Ala Pro Gln Leu Phe Pro
 85 90 95

Val Ser Asp Ile Thr Gln Asn Gln Gln Thr Asn Gln Ala Gly Gly Glu
 100 105 110

Ala Pro Gln Pro Gly Asp Asn Ser Thr Val Gln Thr Ala Ala Ala Val
 115 120 125

Val Phe Ala Cys Pro Gly Ala Asn Gln Gly Gln Gln Leu Ala Asp Ile
 130 135 140

Gly Val Pro Gln Pro Ala Pro Val Ala Ala Pro Ala Arg Arg Thr Arg
 145 150 155 160

Lys Pro Gln Gln Pro Glu Ser Leu Glu Glu Cys Asp Ser Glu Leu Glu
 165 170 175

Ile Lys Arg Tyr Lys Asn Arg Val Ala Ser Arg Lys Cys Arg Ala Lys
 180 185 190

Phe Lys Gln Leu Leu Gln His Tyr Arg Glu Val Ala Ala Ala Lys Ser
 195 200 205

Ser Glu Asn Asp Arg Leu Arg Leu Leu Leu Lys Gln Met Cys Pro Ser
 210 215 220

Leu Asp Val Asp Ser Ile Ile Pro Arg Thr Pro Asp Val Leu His Glu
 225 230 235 240

Asp Leu Leu Asn Phe
 245

<210> 2526

<211> 491

<212> PRT

<213> Homo sapiens

<400> 2526

Met Glu Ser Ser Ala Lys Arg Lys Met Asp Pro Asp Asn Pro Asp Glu
 1 5 10 15

Gly Pro Ser Ser Lys Val Pro Arg Pro Glu Thr Pro Val Thr Lys Ala
 20 25 30

Thr Thr Phe Leu Gln Thr Met Leu Arg Lys Glu Val Asn Ser Gln Leu
 35 40 45

Ser Leu Gly Asp Pro Leu Phe Pro Glu Leu Ala Glu Glu Ser Leu Lys
 50 55 60

Thr Phe Glu Gln Val Thr Glu Asp Cys Asn Glu Asn Pro Glu Lys Asp
 65 70 75 80

Val Leu Ala Glu Leu Val Lys Gln Ile Lys Val Arg Val Asp Met Val
 85 90 95

Arg His Arg Ile Lys Glu His Met Leu Lys Lys Tyr Thr Gln Thr Glu
 100 105 110

Glu Lys Phe Thr Gly Ala Phe Asn Met Met Gly Gly Cys Leu Gln Asn
 115 120 125

Ala Leu Asp Ile Leu Asp Lys Val His Glu Pro Phe Glu Glu Met Lys
 130 135 140

Cys Ile Gly Leu Thr Met Gln Ser Met Tyr Glu Asn Tyr Ile Val Pro
 145 150 155 160

Glu Asp Lys Arg Glu Met Trp Met Ala Cys Ile Lys Glu Leu His Asp
 165 170 175

Val Ser Lys Gly Ala Ala Asn Lys Leu Gly Gly Ala Leu Gln Ala Lys
 180 185 190

Ala Arg Ala Lys Lys Asp Glu Leu Arg Arg Lys Met Met Tyr Met Cys
 195 200 205

Tyr Arg Asn Ile Glu Phe Phe Thr Lys Asn Ser Ala Phe Pro Lys Thr
 210 215 220

Thr Asn Gly Cys Ser Gln Ala Met Ala Ala Leu Gln Asn Leu Pro Gln
 225 230 235 240

Cys Ser Pro Asp Glu Ile Met Ala Tyr Ala Gln Lys Ile Phe Lys Ile
 245 250 255

Leu Asp Glu Glu Arg Asp Lys Val Leu Thr His Ile Asp His Ile Phe
 260 265 270

Met Asp Ile Leu Thr Thr Cys Val Glu Thr Met Cys Asn Glu Tyr Lys
 275 280 285

Val Thr Ser Asp Ala Cys Met Met Thr Met Tyr Gly Gly Ile Ser Leu
 290 295 300

Leu Ser Glu Phe Cys Arg Val Leu Cys Cys Tyr Val Leu Glu Glu Thr
 305 310 315 320

Ser Val Met Leu Ala Lys Arg Pro Leu Ile Thr Lys Pro Glu Val Ile
 325 330 335

Ser Val Met Lys Arg Arg Ile Glu Glu Ile Cys Met Lys Val Phe Ala
 340 345 350

Gln Tyr Ile Leu Gly Ala Asp Pro Leu Arg Val Cys Ser Pro Ser Val
 355 360 365

Asp Asp Leu Arg Ala Ile Ala Glu Glu Ser Asp Glu Glu Glu Ala Ile
 370 375 380

Val Ala Tyr Thr Leu Ala Thr Ala Gly Val Ser Ser Ser Asp Ser Leu
 385 390 395 400

Val Ser Pro Pro Glu Ser Pro Val Pro Ala Thr Ile Pro Leu Ser Ser
 405 410 415

Val Ile Val Ala Glu Asn Ser Asp Gln Glu Glu Ser Glu Gln Ser Asp
 420 425 430

Glu Glu Glu Glu Glu Gly Ala Gln Glu Glu Arg Glu Asp Thr Val Ser
 435 440 445

Val Lys Ser Glu Pro Val Ser Glu Ile Glu Glu Val Ala Pro Glu Glu
 450 455 460

Glu Glu Asp Gly Ala Glu Glu Pro Thr Ala Ser Gly Gly Lys Ser Thr
 465 470 475 480

His Pro Met Val Thr Arg Ser Lys Ala Asp Gln

485

490

<210> 2527
 <211> 491
 <212> PRT
 <213> Homo sapiens

<400> 2527

Met Glu Ser Ser Ala Lys Arg Lys Met Asp Pro Asp Asn Pro Asp Glu
 1 5 10 15

Gly Pro Ser Ser Lys Val Pro Arg Pro Glu Thr Pro Val Thr Lys Ala
 20 25 30

Thr Thr Phe Leu Gln Thr Met Leu Arg Lys Glu Val Asn Ser Gln Leu
 35 40 45

Ser Leu Gly Asp Pro Leu Phe Pro Glu Leu Ala Glu Glu Ser Leu Lys
 50 55 60

Thr Phe Glu Gln Val Thr Glu Asp Cys Asn Glu Asn Pro Glu Lys Asp
 65 70 75 80

Val Leu Ala Glu Leu Val Lys Gln Ile Lys Val Arg Val Asp Met Val
 85 90 95

Arg His Arg Ile Lys Glu His Met Leu Lys Lys Tyr Thr Gln Thr Glu
 100 105 110

Glu Lys Phe Thr Gly Ala Phe Asn Met Met Gly Gly Cys Leu Gln Asn
 115 120 125

Ala Leu Asp Ile Leu Asp Lys Val His Glu Pro Phe Glu Glu Met Lys
 130 135 140

Cys Ile Gly Leu Thr Met Gln Ser Met Tyr Glu Asn Tyr Ile Val Pro
 145 150 155 160

Glu Asp Lys Arg Glu Met Trp Met Ala Cys Ile Lys Glu Leu His Asp
 165 170 175

Val Ser Lys Gly Ala Ala Asn Lys Leu Gly Gly Ala Leu Gln Ala Lys
 180 185 190

Ala Arg Ala Lys Lys Asp Glu Leu Arg Arg Lys Met Met Tyr Met Cys
 195 200 205

Tyr Arg Asn Ile Glu Phe Phe Thr Lys Asn Ser Ala Phe Pro Lys Thr
 210 215 220
 Thr Asn Gly Cys Ser Gln Ala Met Ala Ala Leu Gln Asn Leu Pro Gln
 225 230 235 240
 Cys Ser Pro Asp Glu Ile Met Ala Tyr Ala Gln Lys Ile Phe Lys Ile
 245 250 255
 Leu Asp Glu Glu Arg Asp Lys Val Leu Thr His Ile Asp His Ile Phe
 260 265 270
 Met Asp Ile Leu Thr Thr Cys Val Glu Thr Met Cys Asn Glu Tyr Lys
 275 280 285
 Val Thr Ser Asp Ala Cys Met Met Thr Met Tyr Gly Gly Ile Ser Leu
 290 295 300
 Leu Ser Glu Phe Cys Arg Val Leu Cys Cys Tyr Val Leu Glu Glu Thr
 305 310 315 320
 Ser Val Met Leu Ala Lys Arg Pro Leu Ile Thr Lys Pro Glu Val Ile
 325 330 335
 Ser Val Met Lys Arg Arg Ile Glu Glu Ile Cys Met Lys Val Phe Ala
 340 345 350
 Gln Tyr Ile Leu Gly Ala Asp Pro Leu Arg Val Cys Ser Pro Ser Val
 355 360 365
 Asp Asp Leu Arg Ala Ile Ala Glu Glu Ser Asp Glu Glu Ala Ile
 370 375 380
 Val Ala Tyr Thr Leu Ala Thr Ala Gly Val Ser Ser Ser Asp Ser Leu
 385 390 395 400
 Val Ser Pro Pro Glu Ser Pro Val Pro Ala Thr Ile Pro Leu Ser Ser
 405 410 415
 Val Ile Val Ala Glu Asn Ser Asp Gln Glu Glu Ser Glu Gln Ser Asp
 420 425 430
 Glu Glu Glu Glu Glu Gly Ala Gln Glu Glu Arg Glu Asp Thr Val Ser
 435 440 445

Val Lys Ser Glu Pro Val Ser Glu Ile Glu Glu Val Ala Pro Glu Glu
 450 455 460

Glu Glu Asp Gly Ala Glu Glu Pro Thr Ala Ser Gly Gly Lys Ser Thr
 465 470 475 480

His Pro Met Val Thr Arg Ser Lys Ala Asp Gln
 485 490

<210> 2528

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2528

Met Ser Leu Leu Pro Val Pro Tyr Thr Glu Ala Ala Ser Leu Ser Thr
 1 5 10 15

Gly Ser Thr Val Thr Ile Lys Gly Arg Pro Leu Ala Cys Phe Leu Asn
 20 25 30

Glu Pro Tyr Leu Gln Val Asp Phe His Thr Glu Met Lys Glu Glu Ser
 35 40 45

Asp Ile Val Phe His Phe Gln Val Cys Phe Gly Arg Arg Val Val Met
 50 55 60

Asn Ser Arg Glu Tyr Gly Ala Trp Lys Gln Gln Val Glu Ser Lys Asn
 65 70 75 80

Met Pro Phe Gln Asp Gly Gln Glu Phe Glu Leu Ser Ile Ser Val Leu
 85 90 95

Pro Asp Lys Tyr Gln Val Met Val Asn Gly Gln Ser Ser Tyr Thr Phe
 100 105 110

Asp His Arg Ile Lys Pro Glu Ala Val Lys Met Val Gln Val Trp Arg
 115 120 125

Asp Ile Ser Leu Thr Lys Phe Asn Val Ser Tyr Leu Lys Arg
 130 135 140

<210> 2529

<211> 298

<212> PRT

<213> Homo sapiens

<400> 2529

Met Ala Glu Ala Met Asp Leu Gly Lys Asp Pro Asn Gly Pro Thr His
 1 5 10 15

Ser Ser Thr Leu Phe Val Arg Asp Asp Gly Ser Ser Met Ser Phe Tyr
 20 25 30

Val Arg Pro Ser Pro Ala Lys Arg Arg Leu Ser Thr Leu Ile Leu His
 35 40 45

Gly Gly Gly Thr Val Cys Arg Val Gln Glu Pro Gly Ala Val Leu Leu
 50 55 60

Ala Gln Pro Gly Glu Ala Leu Ala Glu Ala Ser Gly Asp Phe Ile Ser
 65 70 75 80

Thr Gln His Ile Leu Asp Cys Val Glu Arg Asn Glu Arg Leu Glu Leu
 85 90 95

Glu Ala Tyr Arg Leu Gly Pro Ala Ser Ala Ala Asp Thr Gly Ser Glu
 100 105 110

Ala Lys Pro Gly Ala Leu Ala Glu Gly Ala Ala Glu Pro Glu Pro Gln
 115 120 125

Arg His Ala Gly Arg Ile Ala Phe Thr Asp Ala Asp Asp Val Ala Ile
 130 135 140

Leu Thr Tyr Val Lys Glu Asn Ala Arg Ser Pro Ser Ser Val Thr Gly
 145 150 155 160

Asn Ala Leu Trp Lys Ala Met Glu Lys Ser Ser Leu Thr Gln His Ser
 165 170 175

Trp Gln Ser Leu Lys Asp Arg Tyr Leu Lys His Leu Arg Gly Gln Glu
 180 185 190

His Lys Tyr Leu Leu Gly Asp Ala Pro Val Ser Pro Ser Ser Gln Lys
 195 200 205

Leu Lys Arg Lys Ala Glu Glu Asp Pro Glu Ala Ala Asp Ser Gly Glu
 210 215 220

Pro Gln Asn Lys Arg Thr Pro Asp Leu Pro Glu Glu Glu Tyr Val Lys
 225 230 235 240

Glu Glu Ile Gln Glu Asn Glu Glu Ala Val Lys Lys Met Leu Val Glu
 245 250 255

Ala Thr Arg Glu Phe Glu Glu Val Val Val Asp Glu Ser Pro Pro Asp
 260 265 270

Phe Glu Ile His Ile Thr Met Cys Asp Asp Asp Pro Pro Thr Pro Glu
 275 280 285

Glu Asp Ser Glu Thr Gln Pro Asp Glu Glu
 290 295

<210> 2530

<211> 365

<212> PRT

<213> Homo sapiens

<400> 2530

Met Ala Val Met Ala Pro Arg Thr Leu Leu Leu Leu Ser Gly Ala
 1 5 10 15

Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
 20 25 30

Phe Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala
 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60

Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80

Pro Glu Tyr Trp Asp Gln Glu Thr Arg Asn Val Lys Ala Gln Ser Gln
 85 90 95

Thr Asp Arg Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser
 100 105 110

Glu Ala Gly Ser His Thr Ile Gln Ile Met Tyr Gly Cys Asp Val Gly
 115 120 125

Ser Asp Gly Arg Phe Leu Arg Gly Tyr Arg Gln Asp Ala Tyr Asp Gly
 130 135 140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
 145 150 155 160

Asp Met Ala Ala Gln Ile Thr Lys Arg Lys Trp Glu Ala Ala His Glu
 165 170 175

Ala Glu Gln Leu Arg Ala Tyr Leu Asp Gly Thr Cys Val Glu Trp Leu
 180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Pro
 195 200 205

Pro Lys Thr His Met Thr His His Pro Ile Ser Asp His Glu Ala Thr
 210 215 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
 225 230 235 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
 245 250 255

Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val
 260 265 270

Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
 275 280 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Leu Ser Ser Gln Pro
 290 295 300

Thr Ile Pro Ile Val Gly Ile Ile Ala Gly Leu Val Leu Leu Gly Ala
 305 310 315 320

Val Ile Thr Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser
 325 330 335

Ser Asp Arg Lys Gly Gly Ser Tyr Thr Gln Ala Ala Ser Ser Asp Ser
 340 345 350

Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val
 355 360 365

<210> 2531

<211> 155

<212> PRT

<213> Homo sapiens

<400> 2531

Met Glu Leu Arg Ser Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg
 1 5 10 15

Met Asp Gly Asp Ser Arg Asp Gly Gly Gly Lys Asp Ala Thr Gly
 20 25 30

Ser Glu Asp Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His
 35 40 45

Met Thr Ala Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr
 50 55 60

Pro Val Asp Ser Val Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro
 65 70 75 80

Lys Ala Gln Tyr Thr Ser Ile Tyr Gly Ala Leu Lys Lys Ile Met Arg
 85 90 95

Thr Glu Gly Phe Trp Arg Pro Leu Arg Gly Val Asn Val Met Ile Met
 100 105 110

Gly Ala Gly Pro Ala His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met
 115 120 125

Lys Arg Thr Leu Asn Asp Val Phe His His Gln Gly Asn Ser His Leu
 130 135 140

Ala Asn Gly Ile Leu Lys Ala Phe Val Trp Ser
 145 150 155

<210> 2532

<211> 384

<212> PRT

<213> Homo sapiens

<400> 2532

Met Lys Val Thr Ser Leu Asp Gly Arg Gln Leu Arg Lys Met Leu Arg
 1 5 10 15

Lys Glu Ala Ala Ala Arg Cys Val Val Leu Asp Cys Arg Pro Tyr Leu
 20 25 30

Ala Phe Ala Ala Ser Asn Val Arg Gly Ser Leu Asn Val Asn Leu Asn
 35 40 45

Ser Val Val Leu Arg Arg Ala Arg Gly Gly Ala Val Ser Ala Arg Tyr
 50 55 60

Val Leu Pro Asp Glu Ala Ala Arg Ala Arg Leu Leu Gln Glu Gly Gly
 65 70 75 80

Gly Gly Val Ala Ala Val Val Val Leu Asp Gln Gly Ser Arg His Trp
 85 90 95

Gln Lys Leu Arg Glu Glu Ser Ala Ala Arg Val Val Leu Thr Ser Leu
 100 105 110

Leu Ala Cys Leu Pro Ala Gly Pro Arg Val Tyr Phe Leu Lys Gly Gly
 115 120 125

Tyr Glu Thr Phe Tyr Ser Glu Tyr Pro Glu Cys Cys Val Asp Val Lys
 130 135 140

Pro Ile Ser Gln Glu Lys Ile Glu Ser Glu Arg Ala Leu Ile Ser Gln
 145 150 155 160

Cys Gly Lys Pro Val Val Asn Val Ser Tyr Arg Pro Ala Tyr Asp Gln
 165 170 175

Gly Gly Pro Val Glu Ile Leu Pro Phe Leu Tyr Leu Gly Ser Ala Tyr
 180 185 190

His Ala Ser Lys Cys Glu Phe Leu Ala Asn Leu His Ile Thr Ala Leu
 195 200 205

Leu Asn Val Ser Arg Arg Thr Ser Glu Ala Cys Met Thr His Leu His
 210 215 220

Tyr Lys Trp Ile Pro Val Glu Asp Ser His Thr Ala Asp Ile Ser Ser
 225 230 235 240

His Phe Gln Glu Ala Ile Asp Phe Ile Asp Cys Val Arg Glu Lys Gly
 245 250 255

Gly Lys Val Leu Val His Cys Glu Ala Gly Ile Ser Arg Ser Pro Thr
 260 265 270

Ile Cys Met Ala Tyr Leu Met Lys Thr Lys Gln Phe Arg Leu Lys Glu
 275 280 285

Ala Phe Asp Tyr Ile Lys Gln Arg Arg Ser Met Val Ser Pro Asn Phe
 290 295 300

Gly Phe Met Gly Gln Leu Leu Gln Tyr Glu Ser Glu Ile Leu Pro Ser
 305 310 315 320

Thr Pro Asn Pro Gln Pro Pro Ser Cys Gln Gly Glu Ala Ala Gly Ser
 325 330 335

Ser Leu Ile Gly His Leu Gln Thr Leu Ser Pro Asp Met Gln Gly Ala
 340 345 350

Tyr Cys Thr Phe Pro Ala Ser Val Leu Ala Pro Val Pro Thr His Ser
 355 360 365

Thr Val Ser Glu Leu Ser Arg Ser Pro Val Ala Thr Ala Thr Ser Cys
 370 375 380

<210> 2533

<211> 99

<212> PRT

<213> Homo sapiens

<400> 2533

Met Ala Gln Gly Lys Val Ala Ser Leu Gly Pro Ile Lys Gln His Thr
 1 5 10 15

Phe Leu Lys Asn Met Gly Ile Asp Val Arg Leu Lys Val Leu Leu Asp
 20 25 30

Lys Ser Asn Glu Pro Ser Val Arg Gln Gln Leu Leu Gln Gly Tyr Asp
 35 40 45

Met Leu Met Asn Pro Lys Lys Met Gly Glu Arg Phe Asn Phe Phe Ala
 50 55 60

Leu Leu Pro His Gln Arg Leu Gln Gly Gly Arg Tyr Gln Arg Asn Ala
 65 70 75 80

Arg Gln Ser Lys Pro Phe Ala Ser Val Val Ala Gly Phe Ser Glu Leu
 85 90 95

Ala Trp Gln

<210> 2534

<211> 529

<212> PRT

<213> Homo sapiens

<400> 2534

Met Gly Ser Ser Arg Ala Pro Trp Met Gly Arg Val Gly Gly His Gly
 1 5 10 15

Met Met Ala Leu Leu Leu Ala Gly Leu Leu Leu Pro Gly Thr Leu Ala
 20 25 30

Lys Ser Ile Gly Thr Phe Ser Asp Pro Cys Lys Asp Pro Thr Arg Ile
 35 40 45

Thr Ser Pro Asn Asp Pro Cys Leu Thr Gly Lys Gly Asp Ser Ser Gly
 50 55 60

Phe Ser Ser Tyr Ser Gly Ser Ser Ser Gly Ser Ser Ile Ser Ser
 65 70 75 80

Ala Arg Ser Ser Gly Gly Gly Ser Ser Gly Ser Ser Ser Gly Ser Ser
 85 90 95

Ile Ala Gln Gly Gly Ser Ala Gly Ser Phe Lys Pro Gly Thr Gly Tyr
 100 105 110

Ser Gln Val Ser Tyr Ser Ser Gly Ser Gly Ser Ser Leu Gln Gly Ala
 115 120 125

Ser Gly Ser Ser Gln Leu Gly Ser Ser Ser Ser His Ser Gly Ser Ser
 130 135 140

Gly Ser His Ser Gly Ser Ser Ser Ser His Ser Ser Ser Ser Ser Ser
 145 150 155 160

Phe Gln Phe Ser Ser Ser Ser Phe Gln Val Gly Asn Gly Ser Ala Leu
 165 170 175

Pro Thr Asn Asp Asn Ser Tyr Arg Gly Ile Leu Asn Pro Ser Gln Pro
 180 185 190

Gly Gln Ser Ser Ser Ser Ser Gln Thr Ser Gly Val Ser Ser Ser Gly
 195 200 205

Gln Ser Val Ser Ser Asn Gln Arg Pro Cys Ser Ser Asp Ile Pro Asp
 210 215 220

Ser Pro Cys Ser Gly Gly Pro Ile Val Ser His Ser Gly Pro Tyr Ile
 225 230 235 240

Pro Ser Ser His Ser Val Ser Gly Gly Gln Arg Pro Val Val Val Val
 245 250 255

Val Asp Gln His Gly Ser Gly Ala Pro Gly Val Val Gln Gly Pro Pro
 260 265 270

Cys Ser Asn Gly Gly Leu Pro Gly Lys Pro Cys Pro Pro Ile Thr Ser
 275 280 285

Val Asp Lys Ser Tyr Gly Gly Tyr Glu Val Val Gly Gly Ser Ser Asp
 290 295 300

Ser Tyr Leu Val Pro Gly Met Thr Tyr Ser Lys Gly Lys Ile Tyr Pro
 305 310 315 320

Val Gly Tyr Phe Thr Lys Glu Asn Pro Val Lys Gly Ser Pro Gly Val
 325 330 335

Pro Ser Phe Ala Ala Gly Pro Pro Ile Ser Glu Gly Lys Tyr Phe Ser
 340 345 350

Ser Asn Pro Ile Ile Pro Ser Gln Ser Ala Ala Ser Ser Ala Ile Ala
 355 360 365

Phe Gln Pro Val Gly Thr Gly Gly Val Gln Leu Cys Gly Gly Gly Ser
 370 375 380

Thr Gly Ser Lys Gly Pro Cys Ser Pro Ser Ser Ser Arg Val Pro Ser
 385 390 395 400

Ser Ser Ser Ile Ser Ser Ser Ser Gly Ser Pro Tyr His Pro Cys Gly
 405 410 415

Ser Ala Ser Gln Ser Pro Cys Ser Pro Pro Gly Thr Gly Ser Phe Ser
 420 425 430

Ser Ser Ser Ser Ser Gln Ser Ser Gly Lys Ile Ile Leu Gln Pro Cys
 435 440 445

Gly Ser Lys Ser Ser Ser Ser Gly His Pro Cys Met Ser Val Ser Ser
 450 455 460

Leu Thr Leu Thr Gly Gly Pro Asp Gly Ser Pro His Pro Asp Pro Ser
 465 470 475 480

Ala Gly Ala Lys Pro Cys Gly Ser Ser Ser Ala Gly Lys Ile Pro Cys
 485 490 495

Arg Ser Ile Arg Asp Ile Leu Ala Gln Val Lys Pro Leu Gly Pro Gln
 500 505 510

Leu Ala Asp Pro Glu Val Phe Leu Pro Gln Gly Glu Leu Leu Asp Ser
 515 520 525

Pro

<210> 2535

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2535

Met Pro Pro Lys Asp Asp Lys Lys Lys Lys Asp Ala Gly Lys Ser Ala
 1 5 10 15

Lys Lys Asp Lys Asp Pro Val Asn Lys Ser Gly Gly Lys Ala Lys Lys
 20 25 30

Lys Lys Trp Ser Lys Gly Lys Val Arg Asp Lys Leu Asn Asn Leu Val
 35 40 45

Leu Phe Asp Lys Ala Thr Tyr Asp Lys Leu Cys Lys Glu Val Pro Asn
 50 55 60

Tyr Lys Leu Ile Thr Pro Ala Val Val Ser Glu Arg Leu Lys Ile Arg
 65 70 75 80

Gly Ser Leu Ala Arg Ala Ala Leu Gln Glu Leu Leu Ser Lys Gly Leu
 85 90 95

Ile Lys Leu Val Ser Lys His Arg Ala Gln Val Ile Tyr Thr Arg Asn
 100 105 110

Thr Lys Gly Gly Asp Ala Pro Ala Ala Gly Glu Asp Ala
 115 120 125

<210> 2536

<211> 335

<212> PRT

<213> Homo sapiens

<400> 2536

Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15

Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30

Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45

Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Lys Ala Glu Asn
 50 55 60

Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80

Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95

Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110

Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro Ser Ala Asp Ala
 115 120 125

Pro Met Phe Val Met Gly Val Asn His Glu Lys Tyr Asp Asn Ser Leu
 130 135 140

Lys Ile Ile Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu
 145 150 155 160

Ala Lys Val Ile His Asp Asn Phe Gly Ile Val Glu Gly Leu Met Thr
 165 170 175

Thr Val His Ala Ile Thr Ala Thr Gln Lys Thr Val Asp Gly Pro Ser
 180 185 190

Gly Lys Leu Trp Arg Asp Gly Arg Gly Ala Leu Gln Asn Ile Ile Pro
 195 200 205

Ala Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Glu Leu
 210 215 220

Asn Gly Lys Leu Thr Gly Met Ala Phe Arg Val Pro Thr Ala Asn Val
 225 230 235 240

Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys Pro Ala Lys Tyr Asp
245 250 255

Asp Ile Lys Lys Val Val Lys Gln Ala Ser Glu Gly Pro Leu Lys Gly
260 265 270

Ile Leu Gly Tyr Thr Glu His Gln Val Val Ser Ser Asp Phe Asn Ser
275 280 285

Asp Thr His Ser Ser Thr Phe Asp Ala Gly Ala Gly Ile Ala Leu Asn
290 295 300

Asp His Phe Val Lys Leu Ile Ser Trp Tyr Asp Asn Glu Phe Gly Tyr
305 310 315 320

Ser Asn Arg Val Val Asp Leu Met Ala His Met Ala Ser Lys Glu
325 330 335

<210> 2537

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2537

Met Ala Ser Val Ser Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu
1 5 10 15

His Asp Asp Glu Val Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile
20 25 30

Lys Ala Ala Gly Val Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala
35 40 45

Lys Ala Leu Ala Asn Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly
50 55 60

Ala Gly Gly Pro Ala Pro Ala Ala Gly Ala Ala Pro Ala Gly Gly Pro
65 70 75 80

Ala Pro Ser Thr Ala Ala Ala Pro Ala Glu Glu Lys Lys Val Glu Ala
85 90 95

Lys Lys Glu Glu Ser Glu Glu Ser Asp Asp Asp Met Gly Phe Gly Leu
100 105 110

Phe Asp

<210> 2538
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2538

Met Ala Ala Gly Gly Ser Asp Pro Arg Ala Gly Asp Val Glu Glu Asp
 1 5 10 15

Ala Ser Gln Leu Ile Phe Pro Lys Glu Phe Glu Thr Ala Glu Thr Leu
 20 25 30

Leu Asn Ser Glu Val His Met Leu Leu Glu His Arg Lys Gln Gln Asn
 35 40 45

Glu Ser Ala Glu Asp Glu Gln Glu Leu Ser Glu Val Phe Met Lys Thr
 50 55 60

Leu Asn Tyr Thr Ala Arg Phe Ser Arg Phe Lys Asn Arg Glu Thr Ile
 65 70 75 80

Ala Ser Val Arg Ser Leu Leu Leu Gln Lys Lys Leu His Lys Phe Glu
 85 90 95

Leu Ala Cys Leu Ala Asn Leu Cys Pro Glu Thr Ala Glu Glu Ser Lys
 100 105 110

Ala Leu Ile Pro Ser Leu Glu Gly Arg Phe Glu Asp Glu Glu Leu Gln
 115 120 125

Gln Ile Leu Asp Asp Ile Gln Thr Lys Arg Ser Phe Gln Tyr
 130 135 140

<210> 2539
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 2539

Met Pro Ala Tyr His Ser Ser Leu Met Asp Pro Asp Thr Lys Leu Ile
 1 5 10 15

Gly Asn Met Ala Leu Leu Pro Ile Arg Ser Gln Phe Lys Gly Pro Ala
 20 25 30

Pro Arg Glu Thr Lys Asp Thr Asp Ile Val Asp Glu Ala Ile Tyr Tyr

35 40 45

Phe Lys Ala Asn Val Phe Phe Lys Asn Tyr Glu Ile Lys Asn Glu Ala
50 55 60

Asp Arg Thr Leu Ile Tyr Ile Thr Leu Tyr Ile Ser Glu Cys Leu Lys
65 70 75 80

Lys Leu Gln Lys Cys Asn Ser Lys Ser Gln Gly Glu Lys Glu Met Tyr
85 90 95

Thr Leu Gly Ile Thr Asn Phe Pro Ile Pro Gly Glu Pro Gly Phe Pro
100 105 110

Leu Asn Ala Ile Tyr Ala Lys Pro Ala Asn Lys Gln Glu Asp Glu Val
115 120 125

Met Arg Ala Tyr Leu Gln Gln Leu Arg Gln Glu Thr Gly Leu Arg Leu
130 135 140

Cys Glu Lys Val Phe Asp Pro Gln Asn Asp Lys Pro Ser Lys Trp Trp
145 150 155 160

Thr Cys Phe Val Lys Arg Gln Phe Met Asn Lys Ser Leu Ser Gly Pro
165 170 175

Gly Gln

<210> 2540
<211> 351
<212> PRT
<213> Homo sapiens

<400> 2540

Met Glu Thr Asn Phe Ser Thr Pro Leu Asn Glu Tyr Glu Glu Val Ser
1 5 10 15

Tyr Glu Ser Ala Gly Tyr Thr Val Leu Arg Ile Leu Pro Leu Val Val
20 25 30

Leu Gly Val Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile
35 40 45

Trp Val Ala Gly Phe Arg Met Thr Arg Thr Val Thr Thr Ile Cys Tyr
50 55 60

Leu Asn Leu Ala Leu Ala Asp Phe Ser Phe Thr Ala Thr Leu Pro Phe
 65 70 75 80

Leu Ile Val Ser Met Ala Met Gly Glu Lys Trp Pro Phe Gly Trp Phe
 85 90 95

Leu Cys Lys Leu Ile His Ile Val Val Asp Ile Asn Leu Phe Gly Ser
 100 105 110

Val Phe Leu Ile Gly Phe Ile Ala Leu Asp Arg Cys Ile Cys Val Leu
 115 120 125

His Pro Val Trp Ala Gln Asn His Arg Thr Val Ser Leu Ala Met Lys
 130 135 140

Val Ile Val Gly Pro Trp Ile Leu Ala Leu Val Leu Thr Leu Pro Val
 145 150 155 160

Phe Leu Phe Leu Thr Thr Val Thr Ile Pro Asn Gly Asp Thr Tyr Cys
 165 170 175

Thr Phe Asn Phe Ala Ser Trp Gly Gly Thr Pro Glu Glu Arg Leu Lys
 180 185 190

Val Ala Ile Thr Met Leu Thr Ala Arg Gly Ile Ile Arg Phe Val Ile
 195 200 205

Gly Phe Ser Leu Pro Met Ser Ile Val Ala Ile Cys Tyr Gly Leu Ile
 210 215 220

Ala Ala Lys Ile His Lys Lys Gly Met Ile Lys Ser Ser Arg Pro Leu
 225 230 235 240

Arg Val Leu Thr Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro
 245 250 255

Phe Gln Leu Val Ala Leu Leu Gly Thr Val Trp Leu Lys Glu Met Leu
 260 265 270

Phe Tyr Gly Lys Tyr Lys Ile Ile Asp Ile Leu Val Asn Pro Thr Ser
 275 280 285

Ser Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe
 290 295 300

Val Gly Gln Asp Phe Arg Glu Arg Leu Ile His Ser Leu Pro Thr Ser
305 310 315 320

Leu Glu Arg Ala Leu Ser Glu Asp Ser Ala Pro Thr Asn Asp Thr Ala
325 330 335

Ala Asn Ser Ala Ser Pro Pro Ala Glu Thr Glu Leu Gln Ala Met
340 345 350

<210> 2541

<211> 349

<212> PRT

<213> Homo sapiens

<400> 2541

Met Glu Thr Pro Pro Val Asn Thr Ile Gly Glu Lys Asp Thr Ser Gln
1 5 10 15

Pro Gln Gln Glu Trp Glu Lys Asn Leu Arg Glu Asn Leu Asp Ser Val
20 25 30

Ile Gln Ile Arg Gln Gln Pro Arg Asp Pro Pro Thr Glu Thr Leu Glu
35 40 45

Leu Glu Val Ser Pro Asp Pro Ala Ser Gln Ile Leu Glu His Thr Gln
50 55 60

Gly Ala Glu Lys Leu Val Ala Glu Leu Glu Gly Asp Ser His Lys Ser
65 70 75 80

His Gly Ser Thr Ser Gln Met Pro Glu Ala Leu Gln Ala Ser Asp Leu
85 90 95

Trp Tyr Cys Pro Asp Gly Ser Phe Val Lys Lys Ile Val Ile Arg Gly
100 105 110

His Gly Leu Asp Lys Pro Lys Leu Gly Ser Cys Cys Arg Val Leu Ala
115 120 125

Leu Gly Phe Pro Phe Gly Ser Gly Pro Pro Glu Gly Trp Thr Glu Leu
130 135 140

Thr Met Gly Val Gly Pro Trp Arg Glu Glu Thr Trp Gly Glu Leu Ile
145 150 155 160

Glu Lys Cys Leu Glu Ser Met Cys Gln Gly Glu Glu Ala Glu Leu Gln
165 170 175

Leu Pro Gly His Ser Gly Pro Pro Val Arg Leu Thr Leu Ala Ser Phe
 180 185 190

Thr Gln Gly Arg Asp Ser Trp Glu Leu Glu Thr Ser Glu Lys Glu Ala
 195 200 205

Leu Ala Arg Glu Glu Arg Ala Arg Gly Thr Glu Leu Phe Arg Ala Gly
 210 215 220

Asn Pro Glu Gly Ala Ala Arg Cys Tyr Gly Arg Ala Leu Arg Leu Leu
 225 230 235 240

Leu Thr Leu Pro Pro Pro Gly Pro Pro Glu Arg Thr Val Leu His Ala
 245 250 255

Asn Leu Ala Ala Cys Gln Leu Leu Leu Gly Gln Pro Gln Leu Ala Ala
 260 265 270

Gln Ser Cys Asp Arg Val Leu Glu Arg Glu Pro Gly His Leu Lys Ala
 275 280 285

Leu Tyr Arg Arg Gly Val Ala Gln Ala Ala Leu Gly Asn Leu Glu Lys
 290 295 300

Ala Thr Ala Asp Leu Lys Lys Val Leu Ala Ile Asp Pro Lys Asn Arg
 305 310 315 320

Ala Ala Gln Glu Glu Leu Gly Lys Val Val Ile Gln Gly Lys Asn Gln
 325 330 335

Asp Ala Gly Leu Ala Gln Gly Leu Arg Lys Met Phe Gly
 340 345

<210> 2542
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 2542

Met Gly Arg Arg Arg Ala Pro Glu Leu Tyr Arg Ala Pro Phe Pro Leu
 1 5 10 15

Tyr Ala Leu Gln Val Asp Pro Ser Thr Gly Leu Leu Ile Ala Ala Gly
 20 25 30

Gly Gly Gly Ala Ala Lys Thr Gly Ile Lys Asn Gly Val His Phe Leu
 35 40 45

Gln Leu Glu Leu Ile Asn Gly Arg Leu Ser Ala Ser Leu Leu His Ser
 50 55 60

His Asp Thr Glu Thr Arg Ala Thr Met Asn Leu Ala Leu Ala Gly Asp
 65 70 75 80

Ile Leu Ala Ala Gly Gln Asp Ala His Cys Gln Leu Leu Arg Phe Gln
 85 90 95

Ala His Gln Gln Gln Gly Asn Lys Ala Glu Lys Ala Gly Ser Lys Glu
 100 105 110

Gln Gly Pro Arg Gln Arg Lys Gly Ala Ala Pro Ala Glu Lys Lys Cys
 115 120 125

Gly Ala Glu Thr Gln His Glu Gly Leu Glu Leu Arg Val Glu Asn Leu
 130 135 140

Gln Ala Val Gln Thr Asp Phe Ser Ser Asp Pro Leu Gln Lys Val Val
 145 150 155 160

Cys Phe Asn His Asp Asn Thr Leu Leu Ala Thr Gly Gly Thr Asp Gly
 165 170 175

Tyr Val Arg Val Trp Lys Val Pro Ser Leu Glu Lys Val Leu Glu Phe
 180 185 190

Lys Ala His Glu Gly Glu Ile Glu Asp Leu Ala Leu Gly Pro Asp Gly
 195 200 205

Lys Leu Val Thr Val Gly Arg Asp Leu Lys Ala Ser Val Trp Gln Lys
 210 215 220

Asp Gln Leu Val Thr Gln Leu His Trp Gln Glu Asn Gly Pro Thr Phe
 225 230 235 240

Ser Ser Thr Pro Tyr Arg Tyr Gln Ala Cys Arg Phe Gly Gln Val Pro
 245 250 255

Asp Gln Pro Ala Gly Leu Arg Leu Phe Thr Val Gln Ile Pro His Lys
 260 265 270

Arg Leu Arg Gln Pro Pro Pro Cys Tyr Leu Thr Ala Trp Asp Gly Ser

275 280 285
 Asn Phe Leu Pro Leu Arg Thr Lys Ser Cys Gly His Glu Val Val Ser
 290 295 300
 Cys Leu Asp Val Ser Glu Ser Gly Thr Phe Leu Gly Leu Gly Thr Val
 305 310 315 320
 Thr Gly Ser Val Ala Ile Tyr Ile Ala Phe Ser Leu Gln Cys Leu Tyr
 325 330 335
 Tyr Val Arg Glu Ala His Gly Ile Val Thr Asp Val Ala Phe Leu
 340 345 350
 Pro Glu Lys Gly Arg Gly Pro Glu Leu Leu Gly Ser His Glu Thr Ala
 355 360 365
 Leu Phe Ser Val Ala Val Asp Ser Arg Cys Gln Leu His Leu Leu Pro
 370 375 380
 Ser Arg Arg Ser Val Pro Val Trp Leu Leu Leu Leu Leu Cys Val Gly
 385 390 395 400
 Leu Ile Ile Val Thr Ile Leu Leu Leu Gln Ser Ala Phe Pro Gly Phe
 405 410 415
 Leu

 <210> 2543
 <211> 309
 <212> PRT
 <213> Homo sapiens

 <400> 2543
 Met Arg Gln Asn Asp Lys Ile Met Cys Ile Leu Glu Asn Arg Lys Lys
 1 5 10 15
 Arg Asp Arg Lys Asn Leu Cys Arg Ala Ile Asn Asp Phe Gln Gln Ser
 20 25 30
 Phe Gln Lys Pro Glu Thr Arg Arg Glu Phe Asp Leu Ser Asp Pro Leu
 35 40 45
 Ala Leu Lys Lys Asp Leu Pro Ala Arg Gln Ser Asp Asn Asp Val Arg
 50 55 60

Asn Thr Ile Ser Gly Met Gln Lys Phe Met Gly Glu Asp Leu Asn Phe
 65 70 75 80

His Glu Arg Lys Lys Phe Gln Glu Glu Gln Asn Arg Glu Trp Ser Leu
 85 90 95

Gln Gln Gln Arg Glu Trp Lys Asn Ala Arg Ala Glu Gln Lys Cys Ala
 100 105 110

Glu Ala Leu Tyr Thr Glu Thr Arg Leu Gln Phe Asp Glu Thr Ala Lys
 115 120 125

His Leu Gln Lys Leu Glu Ser Thr Thr Arg Lys Ala Val Cys Ala Ser
 130 135 140

Val Lys Asp Phe Asn Lys Ser Gln Ala Ile Glu Ser Val Glu Arg Lys
 145 150 155 160

Lys Gln Glu Lys Lys Gln Glu Gln Glu Asp Asn Leu Ala Glu Ile Thr
 165 170 175

Asn Leu Leu Arg Gly Asp Leu Leu Ser Glu Asn Pro Gln Gln Ala Ala
 180 185 190

Ser Ser Phe Gly Pro His Arg Val Val Pro Asp Arg Trp Lys Gly Met
 195 200 205

Thr Gln Glu Gln Leu Glu Gln Ile Arg Leu Val Gln Lys Gln Gln Ile
 210 215 220

Gln Glu Lys Leu Arg Leu Gln Glu Glu Lys Arg Gln Arg Asp Leu Asp
 225 230 235 240

Trp Asp Arg Arg Arg Ile Gln Gly Ala Arg Ala Thr Leu Leu Phe Glu
 245 250 255

Arg Gln Gln Trp Arg Arg Gln Arg Asp Leu Arg Arg Ala Leu Asp Ser
 260 265 270

Ser Asn Leu Ser Leu Ala Lys Glu Gln His Leu Gln Lys Lys Tyr Met
 275 280 285

Asn Glu Val Tyr Thr Asn Gln Pro Thr Gly Asp Tyr Phe Thr Gln Phe
 290 295 300

Asn Thr Gly Ser Arg
305

<210> 2544
<211> 838
<212> PRT
<213> Homo sapiens

<400> 2544

Met Gln Glu Gln Glu Ile Gly Phe Ile Ser Lys Tyr Asn Glu Gly Leu
1 5 10 15

Cys Val Asn Thr Asp Pro Val Ser Ile Leu Thr Ser Ile Leu Asp Met
20 25 30

Ser Leu His Arg Gln Met Gly Ser Asp Arg Asp Leu Gln Ser Ser Ala
35 40 45

Ser Ser Val Ser Leu Pro Ser Val Lys Lys Ala Pro Lys Lys Arg Arg
50 55 60

Ile Ser Ile Gly Ser Leu Phe Arg Arg Lys Lys Asp Asn Lys Arg Lys
65 70 75 80

Ser Arg Glu Leu Asn Gly Gly Val Asp Gly Ile Ala Ser Ile Glu Ser
85 90 95

Ile His Ser Glu Met Cys Thr Asp Lys Asn Ser Ile Phe Ser Thr Asn
100 105 110

Thr Ser Ser Asp Asn Gly Leu Thr Ser Ile Ser Lys Gln Ile Gly Asp
115 120 125

Phe Ile Glu Cys Pro Leu Cys Leu Leu Arg His Ser Lys Asp Arg Phe
130 135 140

Pro Asp Ile Met Thr Cys His His Arg Ser Cys Val Asp Cys Leu Arg
145 150 155 160

Gln Tyr Leu Arg Ile Glu Ile Ser Glu Ser Arg Val Asn Ile Ser Cys
165 170 175

Pro Glu Cys Thr Glu Arg Phe Asn Pro His Asp Ile Arg Leu Ile Leu
180 185 190

Ser Asp Asp Val Leu Met Glu Lys Tyr Glu Glu Phe Met Leu Arg Arg
195 200 205

Trp Leu Val Ala Asp Pro Asp Cys Arg Trp Cys Pro Ala Pro Asp Cys
210 215 220

Gly Tyr Ala Val Ile Ala Phe Gly Cys Ala Ser Cys Pro Lys Leu Thr
225 230 235 240

Cys Gly Arg Glu Gly Cys Gly Thr Glu Phe Cys Tyr His Cys Lys Gln
245 250 255

Ile Trp His Pro Asn Gln Thr Cys Asp Ala Ala Arg Gln Glu Arg Ala
260 265 270

Gln Ser Leu Arg Leu Arg Thr Ile Arg Ser Ser Ser Ile Ser Tyr Ser
275 280 285

Gln Glu Ser Gly Ala Ala Ala Asp Asp Ile Lys Pro Cys Pro Arg Cys
290 295 300

Ala Ala Tyr Ile Ile Lys Met Asn Asp Gly Ser Cys Asn His Met Thr
305 310 315 320

Cys Ala Val Cys Gly Cys Glu Phe Cys Trp Leu Cys Met Lys Glu Ile
325 330 335

Ser Asp Leu His Tyr Leu Ser Pro Ser Gly Cys Thr Phe Trp Gly Lys
340 345 350

Lys Pro Trp Ser Arg Lys Lys Lys Ile Leu Trp Gln Leu Gly Thr Leu
355 360 365

Val Gly Ala Pro Val Gly Ile Ala Leu Ile Ala Gly Ile Ala Ile Pro
370 375 380

Ala Met Ile Ile Gly Ile Pro Val Tyr Val Gly Arg Lys Ile His Asn
385 390 395 400

Arg Tyr Glu Gly Lys Asp Val Ser Lys His Lys Arg Asn Leu Ala Ile
405 410 415

Ala Gly Gly Val Thr Leu Ser Val Ile Val Ser Pro Val Val Ala Ala
420 425 430

Val Thr Val Gly Ile Gly Val Pro Ile Met Leu Ala Tyr Val Tyr Gly
435 440 445

Val Val Pro Ile Ser Leu Cys Arg Ser Gly Gly Cys Gly Val Ser Ala
 450 455 460

Gly Asn Gly Lys Gly Val Arg Ile Glu Phe Asp Asp Glu Asn Asp Ile
 465 470 475 480

Asn Val Gly Gly Thr Asn Thr Ala Val Asp Thr Thr Ser Val Ala Glu
 485 490 495

Ala Arg His Asn Pro Ser Ile Gly Glu Gly Ser Val Gly Gly Leu Thr
 500 505 510

Gly Ser Leu Ser Ala Ser Gly Ser His Met Asp Arg Ile Gly Ala Ile
 515 520 525

Arg Asp Asn Leu Ser Glu Thr Ala Ser Thr Met Ala Leu Ala Gly Ala
 530 535 540

Ser Ile Thr Gly Ser Leu Ser Gly Ser Ala Met Val Asn Cys Phe Asn
 545 550 555 560

Arg Leu Glu Val Gln Ala Asp Val Gln Lys Glu Arg Tyr Ser Leu Ser
 565 570 575

Gly Glu Ser Gly Thr Val Ser Leu Gly Thr Val Ser Asp Asn Ala Ser
 580 585 590

Thr Lys Ala Met Ala Gly Ser Ile Leu Asn Ser Tyr Ile Pro Leu Asp
 595 600 605

Lys Glu Gly Asn Ser Met Glu Val Gln Val Asp Ile Glu Ser Lys Pro
 610 615 620

Ser Lys Phe Arg His Asn Ser Gly Ser Ser Ser Val Asp Asp Gly Ser
 625 630 635 640

Ala Thr Arg Ser Tyr Ala Gly Gly Ser Ser Ser Gly Leu Pro Glu Gly
 645 650 655

Lys Ser Ser Ala Thr Lys Trp Ser Lys Glu Ala Thr Ala Gly Lys Lys
 660 665 670

Ser Lys Ser Gly Lys Leu Arg Lys Lys Gly Asn Met Lys Ile Asn Glu
 675 680 685

Thr Arg Glu Asp Met Asp Ala Gln Leu Leu Glu Gln Gln Ser Thr Asn
690 695 700

Ser Ser Glu Phe Glu Ala Pro Ser Leu Ser Asp Ser Met Pro Ser Val
705 710 715 720

Ala Asp Ser His Ser Ser His Phe Ser Glu Phe Ser Cys Ser Asp Leu
725 730 735

Glu Ser Met Lys Thr Ser Cys Ser His Gly Ser Ser Asp Tyr His Thr
740 745 750

Arg Phe Ala Thr Val Asn Ile Leu Pro Glu Val Glu Asn Asp Arg Leu
755 760 765

Glu Asn Ser Pro His Gln Cys Ser Ile Ser Val Val Thr Gln Thr Ala
770 775 780

Ser Cys Ser Glu Val Ser Gln Leu Asn His Ile Ala Glu Glu His Gly
785 790 795 800

Asn Asn Gly Ile Lys Pro Asn Val Asp Leu Tyr Phe Gly Asp Ala Leu
805 810 815

Lys Glu Thr Asn Asn Asn His Ser His Gln Thr Met Glu Leu Lys Val
820 825 830

Ala Ile Gln Thr Glu Ile
835

<210> 2545

<211> 1539

<212> PRT

<213> Homo sapiens

<400> 2545

Met Glu Pro Gly Cys Asp Glu Phe Leu Pro Pro Pro Glu Cys Pro Val
1 5 10 15

Phe Glu Pro Ser Trp Ala Glu Phe Gln Asp Pro Leu Gly Tyr Ile Ala
20 25 30

Lys Ile Arg Pro Ile Ala Glu Lys Ser Gly Ile Cys Lys Ile Arg Pro
35 40 45

Pro Ala Asp Trp Gln Pro Pro Phe Ala Val Glu Val Asp Asn Phe Arg
50 55 60

Phe Thr Pro Arg Val Gln Arg Leu Asn Glu Leu Glu Ala Gln Thr Arg
65 70 75 80

Val Lys Leu Asn Tyr Leu Asp Gln Ile Ala Lys Phe Trp Glu Ile Gln
85 90 95

Gly Ser Ser Leu Lys Ile Pro Asn Val Glu Arg Lys Ile Leu Asp Leu
100 105 110

Tyr Ser Leu Ser Lys Ile Val Ile Glu Glu Gly Gly Tyr Glu Ala Ile
115 120 125

Cys Lys Asp Arg Arg Trp Ala Arg Val Ala Gln Arg Leu His Tyr Pro
130 135 140

Pro Gly Lys Asn Ile Gly Ser Leu Leu Arg Ser His Tyr Glu Arg Ile
145 150 155 160

Ile Tyr Pro Tyr Glu Met Phe Gln Ser Gly Ala Asn His Val Gln Cys
165 170 175

Asn Thr His Pro Phe Asp Asn Glu Val Lys Asp Lys Glu Tyr Lys Pro
180 185 190

His Ser Ile Pro Leu Arg Gln Ser Val Gln Pro Ser Lys Phe Ser Ser
195 200 205

Tyr Ser Arg Arg Ala Lys Arg Leu Gln Pro Asp Pro Glu Pro Thr Glu
210 215 220

Glu Asp Ile Glu Lys His Pro Glu Leu Lys Lys Leu Gln Ile Tyr Gly
225 230 235 240

Pro Gly Pro Lys Met Met Gly Leu Gly Leu Met Ala Lys Asp Lys Asp
245 250 255

Lys Thr Val His Lys Lys Val Thr Cys Pro Pro Thr Val Thr Val Lys
260 265 270

Asp Glu Gln Ser Gly Gly Gly Asn Val Ser Ser Thr Leu Leu Lys Gln
275 280 285

His Leu Ser Leu Glu Pro Cys Thr Lys Thr Thr Met Gln Leu Arg Lys
290 295 300

Asn His Ser Ser Ala Gln Phe Ile Asp Ser Tyr Ile Cys Gln Val Cys
 305 310 315 320

Ser Arg Gly Asp Glu Asp Asn Lys Leu Leu Phe Cys Asp Gly Cys Asp
 325 330 335

Asp Asn Tyr His Ile Phe Cys Leu Leu Pro Pro Leu Pro Glu Ile Pro
 340 345 350

Arg Gly Ile Trp Arg Cys Pro Lys Cys Ile Leu Ala Glu Cys Lys Gln
 355 360 365

Pro Pro Glu Ala Phe Gly Phe Glu Gln Ala Thr Gln Glu Tyr Ser Leu
 370 375 380

Gln Ser Phe Gly Glu Met Ala Asp Ser Phe Lys Ser Asp Tyr Phe Asn
 385 390 395 400

Met Pro Val His Met Val Pro Thr Glu Leu Val Glu Lys Glu Phe Trp
 405 410 415

Arg Leu Val Ser Ser Ile Glu Glu Asp Val Thr Val Glu Tyr Gly Ala
 420 425 430

Asp Ile His Ser Lys Glu Phe Gly Ser Gly Phe Pro Val Ser Asn Ser
 435 440 445

Lys Gln Asn Leu Ser Pro Glu Glu Lys Glu Tyr Ala Thr Ser Gly Trp
 450 455 460

Asn Leu Asn Val Met Pro Val Leu Asp Gln Ser Val Leu Cys His Ile
 465 470 475 480

Asn Ala Asp Ile Ser Gly Met Lys Val Pro Trp Leu Tyr Val Gly Met
 485 490 495

Val Phe Ser Ala Phe Cys Trp His Ile Glu Asp His Trp Ser Tyr Ser
 500 505 510

Ile Asn Tyr Leu His Trp Gly Glu Pro Lys Thr Trp Tyr Gly Val Pro
 515 520 525

Ser Leu Ala Ala Glu His Leu Glu Glu Val Met Lys Met Leu Thr Pro
 530 535 540

Glu Leu Phe Asp Ser Gln Pro Asp Leu Leu His Gln Leu Val Thr Leu
545 550 555 560

Met Asn Pro Asn Thr Leu Met Ser His Gly Val Pro Val Val Arg Thr
565 570 575

Asn Gln Cys Ala Gly Glu Phe Val Ile Thr Phe Pro Arg Ala Tyr His
580 585 590

Ser Gly Phe Asn Gln Gly Tyr Asn Phe Ala Glu Ala Val Asn Phe Cys
595 600 605

Thr Ala Asp Trp Leu Pro Ala Gly Arg Gln Cys Ile Glu His Tyr Arg
610 615 620

Arg Leu Arg Arg Tyr Cys Val Phe Ser His Glu Glu Leu Ile Cys Lys
625 630 635 640

Met Ala Ala Phe Pro Glu Thr Leu Asp Leu Asn Leu Ala Val Ala Val
645 650 655

His Lys Glu Met Phe Ile Met Val Gln Glu Glu Arg Arg Leu Arg Lys
660 665 670

Ala Leu Leu Glu Lys Gly Val Thr Glu Ala Glu Arg Glu Ala Phe Glu
675 680 685

Leu Leu Pro Asp Asp Glu Arg Gln Cys Ile Lys Cys Lys Thr Thr Cys
690 695 700

Phe Leu Ser Ala Leu Ala Cys Tyr Asp Cys Pro Asp Gly Leu Val Cys
705 710 715 720

Leu Ser His Ile Asn Asp Leu Cys Lys Cys Ser Ser Ser Arg Gln Tyr
725 730 735

Leu Arg Tyr Arg Tyr Thr Leu Asp Glu Leu Pro Thr Met Leu His Lys
740 745 750

Leu Lys Ile Arg Ala Glu Ser Phe Asp Thr Trp Ala Asn Lys Val Arg
755 760 765

Val Ala Leu Glu Val Glu Asp Gly Arg Lys Arg Ser Phe Glu Glu Leu
770 775 780

Arg Ala Leu Glu Ser Glu Ala Arg Glu Arg Arg Phe Pro Asn Ser Glu

785		790		795		800
Leu Leu Gln Arg	Leu Lys Asn Cys	Leu Ser Glu Val	Glu Ala Cys Ile			
	805		810		815	
Ala Gln Val Leu Gly	Leu Val Ser Gly	Gln Val Ala Arg Met Asp Thr				
	820		825		830	
Pro Gln Leu Thr	Leu Thr Glu Leu Arg Val	Leu Leu Glu Gln Met Gly				
	835		840		845	
Ser Leu Pro Cys Ala Met	His Gln Ile Gly Asp Val Lys Asp Val Leu					
	850		855		860	
Glu Gln Val Glu Ala Tyr	Gln Ala Glu Ala Arg Glu Ala Leu Ala Thr					
	865		870		875	880
Leu Pro Ser Ser Pro Gly	Leu Leu Arg Ser Leu Leu Glu Arg Gly Gln					
	885		890		895	
Gln Leu Gly Val Glu Val	Pro Glu Ala His Gln Leu Gln Gln Gln Val					
	900		905		910	
Glu Gln Ala Gln Trp Leu Asp	Glu Val Lys Gln Ala Leu Ala Pro Ser					
	915		920		925	
Ala His Arg Gly Ser Leu Val	Ile Met Gln Gly Leu Leu Val Met Gly					
	930		935		940	
Ala Lys Ile Ala Ser Ser Pro Ser Val	Asp Lys Ala Arg Ala Glu Leu					
	945		950		955	960
Gln Glu Leu Leu Thr	Ile Ala Glu Arg Trp Glu Glu Lys Ala His Phe					
	965		970		975	
Cys Leu Glu Ala Arg Gln Lys His	Pro Pro Ala Thr Leu Glu Ala Ile					
	980		985		990	
Ile Arg Glu Thr Glu Asn Ile	Pro Val His Leu Pro Asn Ile Gln Ala					
	995		1000		1005	
Leu Lys Glu Ala Leu Thr Lys	Ala Gln Ala Trp Ile Ala Asp Val					
	1010		1015		1020	
Asp Glu Ile Gln Asn Gly Asp	His Tyr Pro Cys Leu Asp Asp Leu					
	1025		1030		1035	

Glu Gly Leu Val Ala Val Gly Arg Asp Leu Pro Val Gly Leu Glu
 1040 1045 1050

Glu Leu Arg Gln Leu Glu Leu Gln Val Leu Thr Ala His Ser Trp
 1055 1060 1065

Arg Glu Lys Ala Ser Lys Thr Phe Leu Lys Lys Asn Ser Cys Tyr
 1070 1075 1080

Thr Leu Leu Glu Val Leu Cys Pro Cys Ala Asp Ala Gly Ser Asp
 1085 1090 1095

Ser Thr Lys Arg Ser Arg Trp Met Glu Lys Ala Leu Gly Leu Tyr
 1100 1105 1110

Gln Cys Asp Thr Glu Leu Leu Gly Leu Ser Ala Gln Asp Leu Arg
 1115 1120 1125

Asp Pro Gly Ser Val Ile Val Ala Phe Lys Glu Gly Glu Gln Lys
 1130 1135 1140

Glu Lys Glu Gly Ile Leu Gln Leu Arg Arg Thr Asn Ser Ala Lys
 1145 1150 1155

Pro Ser Pro Leu Ala Pro Ser Leu Met Ala Ser Ser Pro Thr Ser
 1160 1165 1170

Ile Cys Val Cys Gly Gln Val Pro Ala Gly Val Gly Leu Leu Gln
 1175 1180 1185

Cys Asp Leu Cys Gln Asp Trp Phe His Gly Gln Cys Val Ser Val
 1190 1195 1200

Pro His Leu Leu Thr Ser Pro Lys Pro Ser Leu Thr Ser Ser Pro
 1205 1210 1215

Leu Leu Ala Trp Trp Glu Trp Asp Thr Lys Phe Leu Cys Pro Leu
 1220 1225 1230

Cys Met Arg Ser Arg Arg Pro Arg Leu Glu Thr Ile Leu Ala Leu
 1235 1240 1245

Leu Val Ala Leu Gln Arg Leu Pro Val Arg Leu Pro Glu Gly Glu
 1250 1255 1260

Ala Leu Gln Cys Leu Thr Glu Arg Ala Ile Gly Trp Gln Asp Arg
1265 1270 1275

Ala Arg Lys Ala Leu Ala Phe Glu Asp Val Thr Ala Leu Leu Arg
1280 1285 1290

Gln Leu Ala Glu Leu Arg Gln Gln Leu Gln Ala Lys Pro Arg Pro
1295 1300 1305

Glu Glu Ala Ser Val Tyr Thr Ser Ala Thr Ala Cys Asp Pro Ile
1310 1315 1320

Arg Glu Gly Ser Gly Asn Asn Ile Ser Lys Val Gln Gly Leu Leu
1325 1330 1335

Glu Asn Gly Asp Ser Val Thr Ser Pro Glu Asn Met Ala Pro Gly
1340 1345 1350

Lys Gly Ser Asp Leu Glu Leu Leu Ser Ser Leu Leu Pro Gln Leu
1355 1360 1365

Thr Gly Pro Val Leu Glu Leu Pro Glu Ala Ile Arg Ala Pro Leu
1370 1375 1380

Glu Glu Leu Met Met Glu Gly Gly Leu Leu Glu Val Thr Leu Asp
1385 1390 1395

Glu Asn His Ser Ile Trp Gln Leu Leu Gln Ala Gly Gln Pro Pro
1400 1405 1410

Asp Leu Asp Arg Ile Arg Thr Leu Leu Glu Leu Glu Lys Phe Glu
1415 1420 1425

His Gln Gly Ser Arg Thr Arg Ser Arg Ala Leu Glu Arg Arg Arg
1430 1435 1440

Arg Arg Gln Lys Val Asp Gln Gly Arg Asn Val Glu Asn Leu Val
1445 1450 1455

Gln Gln Glu Leu Gln Ser Lys Arg Ala Arg Ser Ser Gly Ile Met
1460 1465 1470

Ser Gln Val Gly Arg Glu Glu Glu His Tyr Gln Glu Lys Ala Asp
1475 1480 1485

Arg Glu Asn Met Phe Leu Thr Pro Ser Thr Asp His Ser Pro Phe
1490 1495 1500

Leu Lys Gly Asn Gln Asn Ser Leu Gln His Lys Asp Ser Gly Ser
1505 1510 1515

Ser Ala Ala Cys Pro Ser Leu Met Pro Leu Leu Gln Leu Ser Tyr
1520 1525 1530

Ser Asp Glu Gln Gln Leu
1535

<210> 2546

<211> 274

<212> PRT

<213> Homo sapiens

<400> 2546

Met Gly Val Ser Ala Gln Asp Ile Phe Asn Ala Val Ile Lys Glu His
1 5 10 15

Pro Gly Leu Val Gln Arg Leu Pro Cys Val Trp Asn Val Gln Leu Ser
20 25 30

Asp His Thr Leu Ala Glu Arg Cys Tyr Ser Glu Ala Ser Asp Leu Lys
35 40 45

Val Ile His Trp Asn Ser Pro Lys Lys Leu Arg Val Lys Asn Lys His
50 55 60

Val Glu Phe Phe Arg Asn Phe Tyr Leu Thr Phe Leu Glu Tyr Asp Gly
65 70 75 80

Asn Leu Leu Arg Arg Glu Leu Phe Val Cys Pro Ser Gln Pro Pro Pro
85 90 95

Gly Ala Glu Gln Leu Gln Gln Ala Leu Ala Gln Leu Asp Gly Glu Asp
100 105 110

Pro Cys Phe Glu Phe Arg Gln Gln Gln Leu Thr Val His Arg Val His
115 120 125

Val Thr Phe Leu Pro His Glu Pro Pro Pro Pro Arg Pro His Asp Val
130 135 140

Thr Leu Val Ala Gln Leu Ser Met Asp Arg Leu Gln Met Leu Glu Ala
145 150 155 160

Leu Cys Arg His Trp Pro Gly Pro Met Ser Leu Ala Leu Tyr Leu Thr
 165 170 175

Asp Ala Glu Ala Gln Gln Phe Leu His Phe Val Glu Ala Ser Pro Val
 180 185 190

Leu Ala Ala Arg Gln Asp Val Ala Tyr His Val Val Tyr Arg Glu Gly
 195 200 205

Pro Leu Tyr Pro Val Asn Gln Leu Arg Asn Val Ala Leu Ala Gln Ala
 210 215 220

Leu Thr Pro Tyr Val Phe Leu Ser Asp Ile Asp Phe Leu Pro Ala Tyr
 225 230 235 240

Ser Leu Tyr Asp Tyr Leu Arg Glu Ala Arg Ala Gly Phe Asn Ser Ser
 245 250 255

Ser Thr Cys Gly Cys Ala His Pro Ser His Gln Ala Arg Trp Pro Met
 260 265 270

Val Val

<210> 2547
 <211> 504
 <212> PRT
 <213> Homo sapiens

<400> 2547

Met Val Ala Pro Gly Ser Val Thr Ser Arg Leu Gly Ser Val Phe Pro
 1 5 10 15

Phe Leu Leu Val Leu Val Asp Leu Gln Tyr Glu Gly Ala Glu Cys Gly
 20 25 30

Val Asn Ala Asp Val Glu Lys His Leu Glu Leu Gly Lys Lys Leu Leu
 35 40 45

Ala Ala Gly Gln Leu Ala Asp Ala Leu Ser Gln Phe His Ala Ala Val
 50 55 60

Asp Gly Asp Pro Asp Asn Tyr Ile Ala Tyr Tyr Arg Arg Ala Thr Val
 65 70 75 80

Phe Leu Ala Met Gly Lys Ser Lys Ala Ala Leu Pro Asp Leu Thr Lys
85 90 95

Val Ile Gln Leu Lys Met Asp Phe Thr Ala Ala Arg Leu Gln Arg Gly
100 105 110

His Leu Leu Leu Lys Gln Gly Lys Leu Asp Glu Ala Glu Asp Asp Phe
115 120 125

Lys Lys Val Leu Lys Ser Asn Pro Ser Glu Asn Glu Glu Lys Glu Ala
130 135 140

Gln Ser Gln Leu Ile Lys Ser Asp Glu Met Gln Arg Leu Arg Ser Gln
145 150 155 160

Ala Leu Asn Ala Phe Gly Ser Gly Asp Tyr Thr Ala Ala Ile Ala Phe
165 170 175

Leu Asp Lys Ile Leu Glu Val Cys Val Trp Asp Ala Glu Leu Arg Glu
180 185 190

Leu Arg Ala Glu Cys Phe Ile Lys Glu Gly Glu Pro Arg Lys Ala Ile
195 200 205

Ser Asp Leu Lys Ala Ala Ser Lys Leu Lys Asn Asp Asn Thr Glu Ala
210 215 220

Phe Tyr Lys Ile Ser Thr Leu Tyr Tyr Gln Leu Gly Asp His Glu Leu
225 230 235 240

Ser Leu Ser Glu Val Arg Glu Cys Leu Lys Leu Asp Gln Asp His Lys
245 250 255

Arg Cys Phe Ala His Tyr Lys Gln Val Lys Lys Leu Asn Lys Leu Ile
260 265 270

Glu Ser Ala Glu Glu Leu Ile Arg Asp Gly Arg Tyr Thr Asp Ala Thr
275 280 285

Ser Lys Tyr Glu Ser Val Met Lys Thr Glu Pro Ser Ile Ala Glu Tyr
290 295 300

Thr Val Arg Ser Lys Glu Arg Ile Cys His Cys Phe Ser Lys Asp Glu
305 310 315 320

Lys Pro Val Glu Ala Ile Arg Val Cys Ser Glu Val Leu Gln Met Glu

325

330

335

Pro Asp Asn Val Asn Ala Leu Lys Asp Arg Ala Glu Ala Tyr Leu Ile
 340 345 350

Glu Glu Met Tyr Asp Glu Ala Ile Gln Asp Tyr Glu Thr Ala Gln Glu
 355 360 365

His Asn Glu Asn Asp Gln Gln Ile Arg Glu Gly Leu Glu Lys Ala Gln
 370 375 380

Arg Leu Leu Lys Gln Ser Gln Lys Arg Asp Tyr Tyr Lys Ile Leu Gly
 385 390 395 400

Val Lys Arg Asn Ala Lys Lys Gln Glu Ile Ile Lys Ala Tyr Arg Lys
 405 410 415

Leu Ala Leu Gln Trp His Pro Asp Asn Phe Gln Asn Glu Glu Glu Lys
 420 425 430

Lys Lys Ala Glu Lys Lys Phe Ile Asp Ile Ala Ala Ala Lys Glu Val
 435 440 445

Leu Ser Asp Pro Glu Met Arg Lys Lys Phe Asp Asp Gly Glu Asp Pro
 450 455 460

Leu Asp Ala Glu Ser Gln Gln Gly Gly Gly Asn Pro Phe His Arg
 465 470 475 480

Ser Trp Asn Ser Trp Gln Gly Phe Asn Pro Phe Ser Ser Gly Gly Pro
 485 490 495

Phe Arg Phe Lys Phe His Phe Asn
 500

<210> 2548

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2548

Met Pro Pro Gln Gln Gly Asp Pro Ala Phe Pro Asp Arg Cys Glu Ala
 1 5 10 15

Pro Pro Val Pro Pro Arg Arg Glu Arg Gly Gly Arg Gly Gly Arg Gly
 20 25 30

Pro Gly Glu Pro Gly Gly Arg Gly Arg Ala Gly Gly Ala Glu Gly Arg
 35 40 45

Gly Val Lys Cys Val Leu Val Gly Asp Gly Ala Val Gly Lys Thr Ser
 50 55 60

Leu Val Val Ser Tyr Thr Thr Asn Gly Tyr Pro Thr Glu Tyr Ile Pro
 65 70 75 80

Thr Ala Phe Asp Asn Phe Ser Ala Val Val Ser Val Asp Gly Arg Pro
 85 90 95

Val Arg Leu Gln Leu Cys Asp Thr Ala Gly Gln Asp Glu Phe Asp Lys
 100 105 110

Leu Arg Pro Leu Cys Tyr Thr Asn Thr Asp Ile Phe Leu Leu Cys Phe
 115 120 125

Ser Val Val Ser Pro Ser Ser Phe Gln Asn Val Ser Glu Lys Trp Val
 130 135 140

Pro Glu Ile Arg Cys His Cys Pro Lys Ala Pro Ile Ile Leu Val Gly
 145 150 155 160

Thr Gln Ser Asp Leu Arg Glu Asp Val Lys Val Leu Ile Glu Leu Asp
 165 170 175

Lys Cys Lys Glu Lys Pro Val Pro Glu Glu Ala Ala Lys Leu Cys Ala
 180 185 190

Glu Glu Ile Lys Ala Ala Ser Tyr Ile Glu Cys Ser Ala Leu Thr Gln
 195 200 205

Lys Asn Leu Lys Glu Val Phe Asp Ala Ala Ile Val Ala Gly Ile Gln
 210 215 220

Tyr Ser Asp Thr Gln Gln Gln Pro Lys Lys Ser Lys Ser Arg Thr Pro
 225 230 235 240

Asp Lys Met Lys Asn Leu Ser Lys Ser Trp Trp Lys Lys Tyr Cys Cys
 245 250 255

Phe Val

<210> 2549

<211> 394

<212> PRT

<213> Homo sapiens

<400> 2549

Met Phe Lys Lys Lys Ser His Val Arg Asn His Leu Arg Thr His Thr
 1 5 10 15

Gly Glu Arg Pro Phe Pro Cys Pro Asp Cys Ser Lys Pro Phe Asn Ser
 20 25 30

Pro Ala Asn Leu Ala Arg His Arg Leu Thr His Thr Gly Glu Arg Pro
 35 40 45

Tyr Arg Cys Gly Asp Cys Gly Lys Ala Phe Thr Gln Ser Ser Thr Leu
 50 55 60

Arg Gln His Arg Leu Val His Ala Gln His Phe Pro Tyr Arg Cys Gln
 65 70 75 80

Glu Cys Gly Val Arg Phe His Arg Pro Tyr Arg Leu Leu Met His Arg
 85 90 95

Tyr His His Thr Gly Glu Tyr Pro Tyr Lys Cys Arg Glu Cys Pro Arg
 100 105 110

Ser Phe Leu Leu Arg Arg Leu Leu Glu Val His Gln Leu Val Val His
 115 120 125

Ala Gly Arg Gln Pro His Arg Cys Pro Ser Cys Gly Ala Ala Phe Pro
 130 135 140

Ser Ser Leu Arg Leu Arg Glu His Arg Cys Ala Ala Ala Ala Ala Gln
 145 150 155 160

Ala Pro Arg Arg Phe Glu Cys Gly Thr Cys Gly Lys Lys Val Gly Ser
 165 170 175

Ala Ala Arg Leu Gln Ala His Glu Ala Ala His Ala Ala Ala Gly Pro
 180 185 190

Gly Glu Val Leu Ala Lys Glu Pro Pro Ala Pro Arg Ala Pro Arg Ala
 195 200 205

Thr Arg Ala Pro Val Ala Ser Pro Ala Ala Leu Gly Ser Thr Ala Thr
 210 215 220

Ala Ser Pro Ala Ala Pro Ala Arg Arg Arg Gly Leu Glu Cys Ser Glu
225 230 235 240

Cys Lys Lys Leu Phe Ser Thr Glu Thr Ser Leu Gln Val His Arg Arg
245 250 255

Ile His Thr Gly Glu Arg Pro Tyr Pro Cys Pro Asp Cys Gly Lys Ala
260 265 270

Phe Arg Gln Ser Thr His Leu Lys Asp His Arg Arg Leu His Thr Gly
275 280 285

Glu Arg Pro Phe Ala Cys Glu Val Cys Gly Lys Ala Phe Ala Ile Ser
290 295 300

Met Arg Leu Ala Glu His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr
305 310 315 320

Ser Cys Pro Asp Cys Gly Lys Ser Tyr Arg Ser Phe Ser Asn Leu Trp
325 330 335

Lys His Arg Lys Thr His Gln Gln Gln His Gln Ala Ala Val Arg Gln
340 345 350

Gln Leu Ala Glu Ala Glu Ala Ala Val Gly Leu Ala Val Met Glu Thr
355 360 365

Ala Val Glu Ala Leu Pro Leu Val Glu Ala Ile Glu Ile Tyr Pro Leu
370 375 380

Ala Glu Ala Glu Gly Val Gln Ile Ser Gly
385 390

<210> 2550

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2550

Met Glu Asp Leu Cys Val Ala Asn Thr Leu Phe Ala Leu Asn Leu Phe
1 5 10 15

Lys His Leu Ala Lys Ala Ser Pro Thr Gln Asn Leu Phe Leu Ser Pro
20 25 30

Trp Ser Ile Ser Ser Thr Met Ala Met Val Tyr Met Gly Ser Arg Gly
 35 40 45

Ser Thr Glu Asp Gln Met Ala Lys Val Leu Gln Phe Asn Glu Val Gly
 50 55 60

Ala Asn Ala Val Thr Pro Met Thr Pro Glu Asn Phe Thr Ser Cys Gly
 65 70 75 80

Phe Met Gln Gln Ile Gln Lys Gly Ser Tyr Pro Asp Ala Ile Leu Gln
 85 90 95

Ala Gln Ala Ala Asp Lys Ile His Ser Ser Phe Arg Ser Leu Ser Ser
 100 105 110

Ala Ile Asn Ala Ser Thr Gly Asn Tyr Leu Leu Glu Ser Val Asn Lys
 115 120 125

Leu Phe Gly Glu Lys Ser Ala Ser Phe Arg Glu Glu Tyr Ile Arg Leu
 130 135 140

Cys Gln Lys Tyr Tyr Ser Ser Glu Pro Gln Ala Val Asp Phe Leu Glu
 145 150 155 160

Cys Ala Glu Glu Ala Arg Lys Lys Ile Asn Ser Trp Val Lys Thr Gln
 165 170 175

Thr Lys Gly Lys Ile Pro Asn Leu Leu Pro Glu Gly Ser Val Asp Gly
 180 185 190

Asp Thr Arg Met Val Leu Val Asn Ala Val Tyr Phe Lys Gly Lys Trp
 195 200 205

Lys Thr Pro Phe Glu Lys Lys Leu Asn Gly Leu Tyr Pro Phe Arg Val
 210 215 220

Asn Ser Ala Gln Arg Thr Pro Val Gln Met Met Tyr Leu Arg Glu Lys
 225 230 235 240

Leu Asn Ile Gly Tyr Ile Glu Asp Leu Lys Ala Gln Ile Leu Glu Leu
 245 250 255

Pro Tyr Ala Gly Asp Val Ser Met Phe Leu Leu Leu Pro Asp Glu Ile
 260 265 270

Ala Asp Val Ser Thr Gly Leu Glu Leu Leu Glu Ser Glu Ile Thr Tyr

275 280 285
 Asp Lys Leu Asn Lys Trp Thr Ser Lys Asp Lys Met Ala Glu Asp Glu
 290 295 300
 Val Glu Val Tyr Ile Pro Gln Phe Lys Leu Glu Glu His Tyr Glu Leu
 305 310 315
 Arg Ser Ile Leu Arg Ser Met Gly Met Glu Asp Ala Phe Asn Lys Gly
 325 330 335
 Arg Ala Asn Phe Ser Gly Met Ser Glu Arg Asn Asp Leu Phe Leu Ser
 340 345 350
 Glu Val Phe His Gln Ala Met Val Asp Val Asn Glu Glu Gly Thr Glu
 355 360 365
 Ala Ala Ala Gly Thr Gly Gly Val Met Thr Gly Arg Thr Gly His Gly
 370 375 380
 Gly Pro Gln Phe Val Ala Asp His Pro Phe Leu Phe Leu Ile Met His
 385 390 395 400
 Lys Ile Thr Asn Cys Ile Leu Phe Phe Gly Arg Phe Ser Ser Pro
 405 410 415
 <210> 2551
 <211> 434
 <212> PRT
 <213> Homo sapiens
 <400> 2551
 Met Ser Ile Leu Lys Ile His Ala Arg Glu Ile Phe Asp Ser Arg Gly
 1 5 10 15
 Asn Pro Thr Val Glu Val Asp Leu Phe Thr Ser Lys Gly Leu Phe Arg
 20 25 30
 Ala Ala Val Pro Ser Gly Ala Ser Thr Gly Ile Tyr Glu Ala Leu Glu
 35 40 45
 Leu Arg Asp Asn Asp Lys Thr Arg Tyr Met Gly Lys Gly Val Ser Lys
 50 55 60
 Ala Val Glu His Ile Asn Lys Thr Ile Ala Pro Ala Leu Val Ser Lys
 65 70 75 80

Lys Leu Asn Val Thr Glu Gln Glu Lys Ile Asp Lys Leu Met Ile Glu
 85 90 95

Met Asp Gly Thr Glu Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu
 100 105 110

Gly Val Ser Leu Ala Val Cys Lys Ala Gly Ala Val Glu Lys Gly Val
 115 120 125

Pro Leu Tyr Arg His Ile Ala Asp Leu Ala Gly Asn Ser Glu Val Ile
 130 135 140

Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
 145 150 155 160

Asn Lys Leu Ala Met Gln Glu Phe Met Ile Leu Pro Val Gly Ala Ala
 165 170 175

Asn Phe Arg Glu Ala Met Arg Ile Gly Ala Glu Val Tyr His Asn Leu
 180 185 190

Lys Asn Val Ile Lys Glu Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
 195 200 205

Asp Glu Gly Gly Phe Ala Pro Asn Ile Leu Glu Asn Lys Glu Gly Leu
 210 215 220

Glu Leu Leu Lys Thr Ala Ile Gly Lys Ala Gly Tyr Thr Asp Lys Val
 225 230 235 240

Val Ile Gly Met Asp Val Ala Ala Ser Glu Phe Phe Arg Ser Gly Lys
 245 250 255

Tyr Asp Leu Asp Phe Lys Ser Pro Asp Asp Pro Ser Arg Tyr Ile Ser
 260 265 270

Pro Asp Gln Leu Ala Asp Leu Tyr Lys Ser Phe Ile Lys Asp Tyr Pro
 275 280 285

Val Val Ser Ile Glu Asp Pro Phe Asp Gln Asp Asp Trp Gly Ala Trp
 290 295 300

Gln Lys Phe Thr Ala Ser Ala Gly Ile Gln Val Val Gly Asp Asp Leu
 305 310 315 320

Thr Val Thr Asn Pro Lys Arg Ile Ala Lys Ala Val Asn Glu Lys Ser
325 330 335

Cys Asn Cys Leu Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu
340 345 350

Ser Leu Gln Ala Cys Lys Leu Ala Gln Ala Asn Gly Trp Gly Val Met
355 360 365

Val Ser His Arg Ser Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu
370 375 380

Val Val Gly Leu Cys Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg
385 390 395 400

Ser Glu Arg Leu Ala Lys Tyr Asn Gln Leu Leu Arg Ile Glu Glu Glu
405 410 415

Leu Gly Ser Lys Ala Lys Phe Ala Gly Arg Asn Phe Arg Asn Pro Leu
420 425 430

Ala Lys

<210> 2552

<211> 281

<212> PRT

<213> Homo sapiens

<400> 2552

Met Glu Val His Gln Gln Asn Ala Leu Phe Gln Tyr Phe Ala Asp Thr
1 5 10 15

Leu Thr Ala Val Val Gln Asn Ala Lys Lys Asn Gly Arg Tyr Asp Met
20 25 30

Gly Ile Leu Asp Leu Gly Ser Gly Asp Glu Lys Val Arg Lys Ser Asp
35 40 45

Val Lys Lys Phe Leu Thr Pro Gly Tyr Ser Thr Ser Gly His Val Glu
50 55 60

Leu Tyr Thr Ile Ser Val Glu Arg Gly Met Ser Trp Glu Glu Ala Thr
65 70 75 80

Lys Ile Trp Ala Glu Leu Thr Gly Pro Asp Asp Gly Phe Tyr Leu Ser
85 90 95

Leu Gln Ile Arg Asn Asn Lys Lys Thr Ala Ile Leu Val Lys Glu Val
 100 105 110

Asn Pro Lys Lys Lys Leu Phe Leu Val Tyr Arg Pro Asn Thr Gly Lys
 115 120 125

Gln Leu Lys Leu Glu Ile Tyr Ala Asp Leu Lys Lys Lys Tyr Lys Lys
 130 135 140

Val Val Ser Asp Asp Ala Leu Met His Trp Leu Asp Gln Tyr Asn Ser
 145 150 155 160

Ser Ala Asp Thr Cys Thr His Ala Tyr Trp Arg Gly Asn Cys Lys Lys
 165 170 175

Ala Ser Leu Gly Leu Val Cys Glu Ile Gly Leu Arg Cys Arg Thr Tyr
 180 185 190

Tyr Val Leu Cys Gly Ser Val Leu Ser Val Trp Thr Lys Val Glu Gly
 195 200 205

Val Leu Ala Ser Val Ser Gly Thr Asn Val Lys Met Gln Ile Val Arg
 210 215 220

Leu Arg Thr Glu Asp Gly Gln Arg Ile Val Gly Leu Ile Ile Pro Ala
 225 230 235 240

Asn Cys Val Ser Pro Leu Val Asn Leu Leu Ser Thr Ser Asp Gln Ser
 245 250 255

Gln Gln Leu Ala Val Gln Gln Lys Gln Leu Trp Gln Gln His Pro
 260 265 270

Gln Ser Ile Thr Asn Leu Ser Asn Ala
 275 280

<210> 2553

<211> 176

<212> PRT

<213> Homo sapiens

<400> 2553

Met Lys Ala Ser Gly Thr Leu Arg Glu Tyr Lys Val Val Gly Arg Cys
 1 5 10 15

Leu Pro Thr Pro Lys Cys His Thr Pro Pro Leu Tyr Arg Met Arg Ile
20 25 30

Phe Ala Pro Asn His Val Val Ala Lys Ser Arg Phe Trp Tyr Phe Val
35 40 45

Ser Gln Leu Lys Lys Met Lys Lys Ser Ser Gly Glu Ile Val Tyr Cys
50 55 60

Gly Gln Val Phe Glu Lys Ser Pro Leu Arg Val Lys Asn Phe Gly Ile
65 70 75 80

Trp Leu Arg Tyr Asp Ser Arg Ser Gly Thr His Asn Met Tyr Arg Glu
85 90 95

Tyr Arg Asp Leu Thr Thr Ala Gly Ala Val Thr Gln Cys Tyr Arg Asp
100 105 110

Met Gly Ala Arg His Arg Ala Arg Ala His Ser Ile Gln Ile Met Lys
115 120 125

Val Glu Glu Ile Ala Ala Ser Lys Cys Arg Arg Pro Ala Val Lys Gln
130 135 140

Phe His Asp Ser Lys Ile Lys Phe Pro Leu Pro His Arg Val Leu Arg
145 150 155 160

Arg Gln His Lys Pro Arg Phe Thr Thr Lys Arg Pro Asn Thr Phe Phe
165 170 175

<210> 2554

<211> 363

<212> PRT

<213> Homo sapiens

<400> 2554

Met Ala Leu His Cys Gln Glu Phe Gly Gly Lys Asn Tyr Glu Ala Ser
1 5 10 15

Met Ser His Val Asp Lys Phe Val Lys Glu Leu Leu Ser Ser Asp Ala
20 25 30

Met Lys Glu Tyr Asn Arg Ala Arg Val Tyr Leu Asp Glu Asn Tyr Lys
35 40 45

Ser Gln Glu His Phe Thr Ala Leu Gly Ser Phe Tyr Phe Leu His Glu
50 55 60

Ser Leu Lys Asn Ile Tyr Gln Phe Asp Phe Lys Ala Lys Lys Tyr Arg
 65 70 75 80

Lys Val Ala Gly Lys Glu Ile Tyr Ser Asp Thr Leu Glu Ser Thr Pro
 85 90 95

Met Leu Glu Lys Glu Lys Phe Arg Arg Leu Leu Pro Arg Val Gln Met
 100 105 110

Val Lys Lys Arg Leu His Pro Asp Glu Val Val Ile Ala Asp Cys Ala
 115 120 125

Phe Asp Leu Val Asn Ile His Leu Phe His Asp Ala Ser Asn Leu Val
 130 135 140

Ala Trp Glu Thr Ser Pro Ser Val Tyr Ser Gly Ile Arg His Lys Ala
 145 150 155 160

Leu Gly Tyr Val Leu Asp Arg Ile Ile Asp Gln Arg Phe Glu Lys Val
 165 170 175

Ser Tyr Phe Val Phe Gly Asp Phe Asn Phe Arg Leu Asp Ser Lys Ser
 180 185 190

Val Val Glu Thr Leu Ser Ala Lys Pro Pro Met Gln Thr Val Arg Ala
 195 200 205

Ala Asp Thr Asn Glu Val Val Lys Leu Ile Phe Arg Glu Ser Asp Asn
 210 215 220

Asp Arg Lys Val Met Leu Gln Leu Glu Lys Lys Leu Phe Asp Tyr Phe
 225 230 235 240

Asn Gln Glu Val Phe Arg Asp Asn Asn Gly Thr Ala Leu Leu Glu Phe
 245 250 255

Asp Lys Glu Leu Ser Val Phe Lys Asp Arg Leu Tyr Glu Leu Asp Ile
 260 265 270

Ser Phe Pro Pro Ser Tyr Pro Tyr Ser Glu Asp Ala Arg Gln Gly Glu
 275 280 285

Gln Tyr Met Asn Thr Arg Cys Pro Ala Trp Cys Asp Arg Ile Leu Met
 290 295 300

Ser Pro Ser Ala Lys Glu Leu Val Leu Arg Ser Glu Ser Glu Glu Lys
 305 310 315 320

Val Val Thr Tyr Asp His Ile Gly Pro Asn Val Cys Met Gly Asp His
 325 330 335

Lys Pro Val Phe Leu Ala Phe Arg Ile Met Pro Gly Ala Gly Lys Pro
 340 345 350

His Ala His Val His Lys Cys Cys Val Val Gln
 355 360

<210> 2555
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2555

Met Gly His Gln Gln Leu Tyr Trp Ser His Pro Arg Lys Phe Gly Gln
 1 5 10 15

Gly Ser Arg Ser Cys Arg Val Cys Ser Asn Arg His Gly Leu Ile Arg
 20 25 30

Lys Tyr Gly Leu Asn Met Cys Arg Gln Cys Phe Arg Gln Tyr Ala Lys
 35 40 45

Asp Ile Gly Phe Ile Lys Leu Asp
 50 55

<210> 2556
 <211> 520
 <212> PRT
 <213> Homo sapiens

<400> 2556

Met Val Thr Ser Ser Phe Pro Ile Ser Val Ala Val Phe Ala Leu Ile
 1 5 10 15

Thr Leu Gln Val Gly Thr Gln Asp Ser Phe Ile Ala Ala Val Tyr Glu
 20 25 30

His Ala Val Ile Leu Pro Asn Lys Thr Glu Thr Pro Val Ser Gln Glu
 35 40 45

Asp Ala Leu Asn Leu Met Asn Glu Asn Ile Asp Ile Leu Glu Thr Ala
 50 55 60

Ile Lys Gln Ala Ala Glu Gln Gly Ala Arg Ile Ile Val Thr Pro Glu
65 70 75 80

Asp Ala Leu Tyr Gly Trp Lys Phe Thr Arg Glu Thr Val Phe Pro Tyr
85 90 95

Leu Glu Asp Ile Pro Asp Pro Gln Val Asn Trp Ile Pro Cys Gln Asp
100 105 110

Pro His Arg Phe Gly His Thr Pro Val Gln Ala Arg Leu Ser Cys Leu
115 120 125

Ala Lys Asp Asn Ser Ile Tyr Val Leu Ala Asn Leu Gly Asp Lys Lys
130 135 140

Pro Cys Asn Ser Arg Asp Ser Thr Cys Pro Pro Asn Gly Tyr Phe Gln
145 150 155 160

Tyr Asn Thr Asn Val Val Tyr Asn Thr Glu Gly Lys Leu Val Ala Arg
165 170 175

Tyr His Lys Tyr His Leu Tyr Ser Glu Pro Gln Phe Asn Val Pro Glu
180 185 190

Lys Pro Glu Leu Val Thr Phe Asn Thr Ala Phe Gly Arg Phe Gly Ile
195 200 205

Phe Thr Cys Phe Asp Ile Phe Phe Tyr Asp Pro Gly Val Thr Leu Val
210 215 220

Lys Asp Phe His Val Asp Thr Ile Leu Phe Pro Thr Ala Trp Met Asn
225 230 235 240

Val Leu Pro Leu Leu Thr Ala Ile Glu Phe His Ser Ala Trp Ala Met
245 250 255

Gly Met Gly Val Asn Leu Leu Val Ala Asn Thr His His Val Ser Leu
260 265 270

Asn Met Thr Gly Ser Gly Ile Tyr Ala Pro Asn Gly Pro Lys Val Tyr
275 280 285

His Tyr Asp Met Lys Thr Glu Leu Gly Lys Leu Leu Leu Ser Glu Val
290 295 300

Asp Ser His Pro Leu Ser Ser Leu Ala Tyr Pro Thr Ala Val Asn Trp
 305 310 315 320

Asn Ala Tyr Ala Thr Thr Ile Lys Pro Phe Pro Val Gln Lys Asn Thr
 325 330 335

Phe Arg Gly Phe Ile Ser Arg Asp Gly Phe Asn Phe Thr Glu Leu Phe
 340 345 350

Glu Asn Ala Gly Asn Leu Thr Val Cys Gln Lys Glu Leu Cys Cys His
 355 360 365

Leu Ser Tyr Arg Met Leu Gln Lys Glu Glu Asn Glu Val Tyr Val Leu
 370 375 380

Gly Ala Phe Thr Gly Leu His Gly Arg Arg Arg Arg Glu Tyr Trp Gln
 385 390 395 400

Val Cys Thr Met Leu Lys Cys Lys Thr Thr Asn Leu Thr Thr Cys Gly
 405 410 415

Arg Pro Val Glu Thr Ala Ser Thr Arg Phe Glu Met Phe Ser Leu Ser
 420 425 430

Gly Thr Phe Gly Thr Glu Tyr Val Phe Pro Glu Val Leu Leu Thr Glu
 435 440 445

Ile His Leu Ser Pro Gly Lys Phe Glu Val Leu Lys Asp Gly Arg Leu
 450 455 460

Val Asn Lys Asn Gly Ser Ser Gly Pro Ile Leu Thr Val Ser Leu Phe
 465 470 475 480

Gly Arg Trp Tyr Thr Lys Asp Ser Leu Tyr Ser Ser Cys Gly Thr Ser
 485 490 495

Asn Ser Ala Ile Thr Tyr Leu Leu Ile Phe Ile Leu Leu Met Ile Ile
 500 505 510

Ala Leu Gln Asn Ile Val Met Leu
 515 520

<210> 2557

<211> 564

<212> PRT

<213> Homo sapiens

<400> 2557

```

Met Ser Ala Gly Ser Ala Thr His Pro Gly Ala Gly Gly Arg Arg Ser
1      5      10      15

Lys Trp Asp Gln Pro Ala Pro Ala Pro Leu Leu Phe Leu Pro Pro Ala
      20      25      30

Ala Pro Gly Gly Glu Val Thr Ser Ser Gly Gly Ser Pro Gly Gly Thr
      35      40      45

Thr Ala Ala Pro Ser Gly Ala Leu Asp Ala Ala Ala Val Ala Ala
      50      55      60

Lys Ile Asn Ala Met Leu Met Ala Lys Gly Lys Leu Lys Pro Thr Gln
65      70      75      80

Asn Ala Ser Glu Lys Leu Gln Ala Pro Gly Lys Gly Leu Thr Ser Asn
      85      90      95

Lys Ser Lys Asp Asp Leu Val Val Ala Glu Val Glu Ile Asn Asp Val
      100      105      110

Pro Leu Thr Cys Arg Asn Leu Leu Thr Arg Gly Gln Thr Gln Asp Glu
      115      120      125

Ile Ser Arg Leu Ser Gly Ala Ala Val Ser Thr Arg Gly Arg Phe Met
      130      135      140

Thr Thr Glu Glu Lys Ala Lys Val Gly Pro Gly Asp Arg Pro Leu Tyr
145      150      155      160

Leu His Val Gln Gly Gln Thr Arg Glu Leu Val Asp Arg Ala Val Asn
      165      170      175

Arg Ile Lys Glu Ile Ile Thr Asn Gly Val Val Lys Ala Ala Thr Gly
      180      185      190

Thr Ser Pro Thr Phe Asn Gly Ala Thr Val Thr Val Tyr His Gln Pro
      195      200      205

Ala Pro Ile Ala Gln Leu Ser Pro Ala Val Ser Gln Lys Pro Pro Phe
      210      215      220

Gln Ser Gly Met His Tyr Val Gln Asp Lys Leu Phe Val Gly Leu Glu
225      230      235      240

```

His Ala Val Pro Thr Phe Asn Val Lys Glu Lys Val Glu Gly Pro Gly
245 250 255

Cys Ser Tyr Leu Gln His Ile Gln Ile Glu Thr Gly Ala Lys Val Phe
260 265 270

Leu Arg Gly Lys Gly Ser Gly Cys Ile Glu Pro Ala Ser Gly Arg Glu
275 280 285

Ala Phe Glu Pro Met Tyr Ile Tyr Ile Ser His Pro Lys Pro Glu Gly
290 295 300

Leu Ala Ala Ala Lys Lys Leu Cys Glu Asn Leu Leu Gln Thr Val His
305 310 315 320

Ala Glu Tyr Ser Arg Phe Val Asn Gln Ile Asn Thr Ala Val Pro Leu
325 330 335

Pro Gly Tyr Thr Gln Pro Ser Ala Ile Ser Ser Val Pro Pro Gln Pro
340 345 350

Pro Tyr Tyr Pro Ser Asn Gly Tyr Gln Ser Gly Tyr Pro Val Val Pro
355 360 365

Pro Pro Gln Gln Pro Val Gln Pro Pro Tyr Gly Val Pro Ser Ile Val
370 375 380

Pro Pro Ala Val Ser Leu Ala Pro Gly Val Leu Pro Ala Leu Pro Thr
385 390 395 400

Gly Val Pro Pro Val Pro Thr Gln Tyr Pro Ile Thr Gln Val Gln Pro
405 410 415

Pro Ala Ser Thr Gly Gln Ser Pro Met Gly Gly Pro Phe Ile Pro Ala
420 425 430

Ala Pro Val Lys Thr Ala Leu Pro Ala Gly Pro Gln Pro Gln Pro Gln
435 440 445

Pro Gln Pro Pro Leu Pro Ser Gln Pro Gln Ala Gln Lys Arg Arg Phe
450 455 460

Thr Glu Glu Leu Pro Asp Glu Arg Glu Ser Gly Leu Leu Gly Tyr Gln
465 470 475 480

His Gly Pro Ile His Met Thr Asn Leu Gly Thr Gly Phe Ser Ser Gln
 485 490 495

Asn Glu Ile Glu Gly Ala Gly Ser Lys Pro Ala Ser Ser Ser Gly Lys
 500 505 510

Glu Arg Glu Arg Asp Arg Gln Leu Met Pro Pro Pro Ala Phe Pro Val
 515 520 525

Thr Gly Ile Lys Thr Glu Ser Asp Glu Arg Asn Gly Ser Gly Thr Leu
 530 535 540

Thr Gly Ser His Gly Glu Cys Asp Ile Ala Gly Gly Thr Gly Glu Trp
 545 550 555 560

Leu Arg Leu Val

<210> 2558

<211> 462

<212> PRT

<213> Homo sapiens

<400> 2558

Met Gly Lys Glu Lys Thr His Ile Asn Ile Val Val Ile Gly His Val
 1 5 10 15

Asp Ser Gly Lys Ser Thr Thr Thr Gly His Leu Ile Tyr Lys Cys Gly
 20 25 30

Gly Ile Asp Lys Arg Thr Ile Glu Lys Phe Glu Lys Glu Ala Ala Glu
 35 40 45

Met Gly Lys Gly Ser Phe Lys Tyr Ala Trp Val Leu Asp Lys Leu Lys
 50 55 60

Ala Glu Arg Glu Arg Gly Ile Thr Ile Asp Ile Ser Leu Trp Lys Phe
 65 70 75 80

Glu Thr Ser Lys Tyr Tyr Val Thr Ile Ile Asp Ala Pro Gly His Arg
 85 90 95

Asp Phe Ile Lys Asn Met Ile Thr Gly Thr Ser Gln Ala Asp Cys Ala
 100 105 110

Val Leu Ile Val Ala Ala Gly Val Gly Glu Phe Glu Ala Gly Ile Ser

115
 Lys Asn Gly Gln Thr Arg Glu His Ala Leu Leu Ala Tyr Thr Leu Gly
 130 135 140

Val Lys Gln Leu Ile Val Gly Val Asn Lys Met Asp Ser Thr Glu Pro
 145 150 155 160

Pro Tyr Ser Gln Lys Arg Tyr Glu Glu Ile Val Lys Glu Val Ser Thr
 165 170 175

Tyr Ile Lys Lys Ile Gly Tyr Asn Pro Asp Thr Val Ala Phe Val Pro
 180 185 190

Ile Ser Gly Trp Asn Gly Asp Asn Met Leu Glu Pro Ser Ala Asn Met
 195 200 205

Pro Trp Phe Lys Gly Trp Lys Val Thr Arg Lys Asp Gly Asn Ala Ser
 210 215 220

Gly Thr Thr Leu Leu Glu Ala Leu Asp Cys Ile Leu Pro Pro Thr Arg
 225 230 235 240

Pro Thr Asp Lys Pro Leu Arg Leu Pro Leu Gln Asp Val Tyr Lys Ile
 245 250 255

Gly Gly Ile Gly Thr Val Pro Val Gly Arg Val Glu Thr Gly Val Leu
 260 265 270

Lys Pro Gly Met Val Val Thr Phe Ala Pro Val Asn Val Thr Thr Glu
 275 280 285

Val Lys Ser Val Glu Met His His Glu Ala Leu Ser Glu Ala Leu Pro
 290 295 300

Gly Asp Asn Val Gly Phe Asn Val Lys Asn Val Ser Val Lys Asp Val
 305 310 315 320

Arg Arg Gly Asn Val Ala Gly Asp Ser Lys Asn Asp Pro Pro Met Glu
 325 330 335

Ala Ala Gly Phe Thr Ala Gln Val Ile Ile Leu Asn His Pro Gly Gln
 340 345 350

Ile Ser Ala Gly Tyr Ala Pro Val Leu Asp Cys His Thr Ala His Ile
 355 360 365

Ala Cys Lys Phe Ala Glu Leu Lys Glu Lys Ile Asp Arg Arg Ser Gly
 370 375 380

Lys Lys Leu Glu Asp Gly Pro Lys Phe Leu Lys Ser Gly Asp Ala Ala
 385 390 395 400

Ile Val Asp Met Val Pro Gly Lys Pro Met Cys Val Glu Ser Phe Ser
 405 410 415

Asp Tyr Pro Pro Leu Gly Arg Phe Ala Val Arg Asp Met Arg Gln Thr
 420 425 430

Val Ala Val Gly Val Ile Lys Ala Val Asp Lys Lys Ala Ala Gly Ala
 435 440 445

Gly Lys Val Thr Lys Ser Ala Gln Lys Ala Gln Lys Ala Lys
 450 455 460

<210> 2559

<211> 394

<212> PRT

<213> Homo sapiens

<400> 2559

Met Ser Gly Glu Asp Glu Gln Gln Glu Gln Thr Ile Ala Glu Asp Leu
 1 5 10 15

Val Val Thr Lys Tyr Lys Met Gly Gly Asp Ile Ala Asn Arg Val Leu
 20 25 30

Arg Ser Leu Val Glu Ala Ser Ser Ser Gly Val Ser Val Leu Ser Leu
 35 40 45

Cys Glu Lys Gly Asp Ala Met Ile Met Glu Glu Thr Gly Lys Ile Phe
 50 55 60

Lys Lys Glu Lys Glu Met Lys Lys Gly Ile Ala Phe Pro Thr Ser Ile
 65 70 75 80

Ser Val Asn Asn Cys Val Cys His Phe Ser Pro Leu Lys Ser Asp Gln
 85 90 95

Asp Tyr Ile Leu Lys Glu Gly Asp Leu Val Lys Ile Asp Leu Gly Val
 100 105 110

His Val Asp Gly Phe Ile Ala Asn Val Ala His Thr Phe Val Val Asp
 115 120 125

Val Ala Gln Gly Thr Gln Val Thr Gly Arg Lys Ala Asp Val Ile Lys
 130 135 140

Ala Ala His Leu Cys Ala Glu Ala Ala Leu Arg Leu Val Lys Pro Gly
 145 150 155 160

Asn Gln Asn Thr Gln Val Thr Glu Ala Trp Asn Lys Val Ala His Ser
 165 170 175

Phe Asn Cys Thr Pro Ile Glu Gly Met Leu Ser His Gln Leu Lys Gln
 180 185 190

His Val Ile Asp Gly Glu Lys Thr Ile Ile Gln Asn Pro Thr Asp Gln
 195 200 205

Gln Lys Lys Asp His Glu Lys Ala Glu Phe Glu Val His Glu Val Tyr
 210 215 220

Ala Val Asp Val Leu Val Ser Ser Gly Glu Gly Lys Ala Lys Asp Ala
 225 230 235 240

Gly Gln Arg Thr Thr Ile Tyr Lys Arg Asp Pro Ser Lys Gln Tyr Gly
 245 250 255

Leu Lys Met Lys Thr Ser Arg Ala Phe Phe Ser Glu Val Glu Arg Arg
 260 265 270

Phe Asp Ala Met Pro Phe Thr Leu Arg Ala Phe Glu Asp Glu Lys Lys
 275 280 285

Ala Arg Met Gly Val Val Glu Cys Ala Lys His Glu Leu Leu Gln Pro
 290 295 300

Phe Asn Val Leu Tyr Glu Lys Glu Gly Glu Phe Val Ala Gln Phe Lys
 305 310 315 320

Phe Thr Val Leu Leu Met Pro Asn Gly Pro Met Arg Ile Thr Ser Gly
 325 330 335

Pro Phe Glu Pro Asp Leu Tyr Lys Ser Glu Met Glu Val Gln Asp Ala
 340 345 350

Glu Leu Lys Ala Leu Leu Gln Ser Ser Ala Ser Arg Lys Thr Gln Lys

355

360

365

Lys Lys Lys Lys Lys Ala Ser Lys Thr Ala Glu Asn Pro Thr Ser Gly
 370 375 380

Glu Thr Leu Glu Glu Asn Glu Ala Gly Asp
 385 390

<210> 2560

<211> 335

<212> PRT

<213> Homo sapiens

<400> 2560

Met Gly Lys Val Lys Val Gly Val Asn Gly Phe Gly Arg Ile Gly Arg
 1 5 10 15

Leu Val Thr Arg Ala Ala Phe Asn Ser Gly Lys Val Asp Ile Val Ala
 20 25 30

Ile Asn Asp Pro Phe Ile Asp Leu Asn Tyr Met Val Tyr Met Phe Gln
 35 40 45

Tyr Asp Ser Thr His Gly Lys Phe His Gly Thr Val Lys Ala Glu Asn
 50 55 60

Gly Lys Leu Val Ile Asn Gly Asn Pro Ile Thr Ile Phe Gln Glu Arg
 65 70 75 80

Asp Pro Ser Lys Ile Lys Trp Gly Asp Ala Gly Ala Glu Tyr Val Val
 85 90 95

Glu Ser Thr Gly Val Phe Thr Thr Met Glu Lys Ala Gly Ala His Leu
 100 105 110

Gln Gly Gly Ala Lys Arg Val Ile Ile Ser Ala Pro Ser Ala Asp Ala
 115 120 125

Pro Met Phe Val Met Gly Val Asn His Glu Lys Tyr Asp Asn Ser Leu
 130 135 140

Lys Ile Ile Ser Asn Ala Ser Cys Thr Thr Asn Cys Leu Ala Pro Leu
 145 150 155 160

Ala Lys Val Ile His Asp Asn Phe Gly Ile Val Glu Gly Leu Met Thr
 165 170 175

Thr Val His Ala Ile Thr Ala Thr Gln Lys Thr Val Asp Gly Pro Ser
 180 185 190

Gly Lys Leu Trp Arg Asp Gly Arg Gly Ala Leu Gln Asn Ile Ile Pro
 195 200 205

Ala Ser Thr Gly Ala Ala Lys Ala Val Gly Lys Val Ile Pro Glu Leu
 210 215 220

Asn Gly Lys Leu Thr Gly Met Ala Phe Arg Val Pro Thr Ala Asn Val
 225 230 235 240

Ser Val Val Asp Leu Thr Cys Arg Leu Glu Lys Pro Ala Lys Tyr Asp
 245 250 255

Asp Ile Lys Lys Val Val Lys Gln Ala Ser Glu Gly Pro Leu Lys Gly
 260 265 270

Ile Leu Gly Tyr Thr Glu His Gln Val Val Ser Ser Asp Phe Asn Ser
 275 280 285

Asp Thr His Ser Ser Thr Phe Asp Ala Gly Ala Gly Ile Ala Leu Asn
 290 295 300

Asp His Phe Val Lys Leu Ile Ser Trp Tyr Asp Asn Glu Phe Gly Tyr
 305 310 315 320

Ser Asn Arg Val Val Asp Leu Met Ala His Met Ala Ser Lys Glu
 325 330 335

<210> 2561
 <211> 1912
 <212> PRT
 <213> Homo sapiens

<400> 2561

Met Ala Ser Gly Leu Gly Ser Pro Ser Pro Cys Ser Ala Gly Ser Glu
 1 5 10 15

Glu Glu Asp Met Asp Ala Leu Leu Asn Asn Ser Leu Pro Pro Pro His
 20 25 30

Pro Glu Asn Glu Glu Asp Pro Glu Glu Asp Leu Ser Glu Thr Glu Thr
 35 40 45

Pro Lys Leu Lys Lys Lys Lys Lys Pro Lys Lys Pro Arg Asp Pro Lys

50 55 60
 Ile Pro Lys Ser Lys Arg Gln Lys Lys Glu Arg Met Leu Leu Cys Arg
 65 70 75 80
 Gln Leu Gly Asp Ser Ser Gly Glu Gly Pro Glu Phe Val Glu Glu Glu
 85 90 95
 Glu Glu Val Ala Leu Arg Ser Asp Ser Glu Gly Ser Asp Tyr Thr Pro
 100 105 110
 Gly Lys Lys Lys Lys Lys Lys Leu Gly Pro Lys Lys Glu Lys Lys Ser
 115 120 125
 Lys Ser Lys Arg Lys Glu Glu Glu Glu Glu Asp Asp Asp Asp Asp Asp
 130 135 140
 Ser Lys Glu Pro Lys Ser Ser Ala Gln Leu Leu Glu Asp Trp Gly Met
 145 150 155 160
 Glu Asp Ile Asp His Val Phe Ser Glu Glu Asp Tyr Arg Thr Leu Thr
 165 170 175
 Asn Tyr Lys Ala Phe Ser Gln Phe Val Arg Pro Leu Ile Ala Ala Lys
 180 185 190
 Asn Pro Lys Ile Ala Val Ser Lys Met Met Met Val Leu Gly Ala Lys
 195 200 205
 Trp Arg Glu Phe Ser Thr Asn Asn Pro Phe Lys Gly Ser Ser Gly Ala
 210 215 220
 Ser Val Ala Ala Ala Ala Ala Ala Ala Val Ala Val Val Glu Ser Met
 225 230 235 240
 Val Thr Ala Thr Glu Val Ala Pro Pro Pro Pro Val Glu Val Pro
 245 250 255
 Ile Arg Lys Ala Lys Thr Lys Glu Gly Lys Gly Pro Asn Ala Arg Arg
 260 265 270
 Lys Pro Lys Gly Ser Pro Arg Val Pro Asp Ala Lys Lys Pro Lys Pro
 275 280 285
 Lys Lys Val Ala Pro Leu Lys Ile Lys Leu Gly Gly Phe Gly Ser Lys
 290 295 300

Arg Lys Arg Ser Ser Ser Glu Asp Asp Asp Leu Asp Val Glu Ser Asp
 305 310 315 320

Phe Asp Asp Ala Ser Ile Asn Ser Tyr Ser Val Ser Asp Gly Ser Thr
 325 330 335

Ser Arg Ser Ser Arg Ser Arg Lys Lys Leu Arg Thr Thr Lys Lys Lys
 340 345 350

Lys Lys Gly Glu Glu Glu Val Thr Ala Val Asp Gly Tyr Glu Thr Asp
 355 360 365

His Gln Asp Tyr Cys Glu Val Cys Gln Gln Gly Gly Glu Ile Ile Leu
 370 375 380

Cys Asp Thr Cys Pro Arg Ala Tyr His Met Val Cys Leu Asp Pro Asp
 385 390 395 400

Met Glu Lys Ala Pro Glu Gly Lys Trp Ser Cys Pro His Cys Glu Lys
 405 410 415

Glu Gly Ile Gln Trp Glu Ala Lys Glu Asp Asn Ser Glu Gly Glu Glu
 420 425 430

Ile Leu Glu Glu Val Gly Gly Asp Leu Glu Glu Glu Asp Asp His His
 435 440 445

Met Glu Phe Cys Arg Val Cys Lys Asp Gly Gly Glu Leu Leu Cys Cys
 450 455 460

Asp Thr Cys Pro Ser Ser Tyr His Ile His Cys Leu Asn Pro Pro Leu
 465 470 475 480

Pro Glu Ile Pro Asn Gly Glu Trp Leu Cys Pro Arg Cys Thr Cys Pro
 485 490 495

Ala Leu Lys Gly Lys Val Gln Lys Ile Leu Ile Trp Lys Trp Gly Gln
 500 505 510

Pro Pro Ser Pro Thr Pro Val Pro Arg Pro Pro Asp Ala Asp Pro Asn
 515 520 525

Thr Pro Ser Pro Lys Pro Leu Glu Gly Arg Pro Glu Arg Gln Phe Phe
 530 535 540

Val Lys Trp Gln Gly Met Ser Tyr Trp His Cys Ser Trp Val Ser Glu
 545 550 555 560

Leu Gln Leu Glu Leu His Cys Gln Val Met Phe Arg Asn Tyr Gln Arg
 565 570 575

Lys Asn Asp Met Asp Glu Pro Pro Ser Gly Asp Phe Gly Gly Asp Glu
 580 585 590

Glu Lys Ser Arg Lys Arg Lys Asn Lys Asp Pro Lys Phe Ala Glu Met
 595 600 605

Glu Glu Arg Phe Tyr Arg Tyr Gly Ile Lys Pro Glu Trp Met Met Ile
 610 615 620

His Arg Ile Leu Asn His Ser Val Asp Lys Lys Gly His Val His Tyr
 625 630 635 640

Leu Ile Lys Trp Arg Asp Leu Pro Tyr Asp Gln Ala Ser Trp Glu Ser
 645 650 655

Glu Asp Val Glu Ile Gln Asp Tyr Asp Leu Phe Lys Gln Ser Tyr Trp
 660 665 670

Asn His Arg Glu Leu Met Arg Gly Glu Glu Gly Arg Pro Gly Lys Lys
 675 680 685

Leu Lys Lys Val Lys Leu Arg Lys Leu Glu Arg Pro Pro Glu Thr Pro
 690 695 700

Thr Val Asp Pro Thr Val Lys Tyr Glu Arg Gln Pro Glu Tyr Leu Asp
 705 710 715 720

Ala Thr Gly Gly Thr Leu His Pro Tyr Gln Met Glu Gly Leu Asn Trp
 725 730 735

Leu Arg Phe Ser Trp Ala Gln Gly Thr Asp Thr Ile Leu Ala Asp Glu
 740 745 750

Met Gly Leu Gly Lys Thr Val Gln Thr Ala Val Phe Leu Tyr Ser Leu
 755 760 765

Tyr Lys Glu Gly His Ser Lys Gly Pro Phe Leu Val Ser Ala Pro Leu
 770 775 780

Ser Thr Ile Ile Asn Trp Glu Arg Glu Phe Glu Met Trp Ala Pro Asp
 785 790 795 800
 Met Tyr Val Val Thr Tyr Val Gly Asp Lys Asp Ser Arg Ala Ile Ile
 805 810 815
 Arg Glu Asn Glu Phe Ser Phe Glu Asp Asn Ala Ile Arg Gly Gly Lys
 820 825 830
 Lys Ala Ser Arg Met Lys Lys Glu Ala Ser Val Lys Phe His Val Leu
 835 840 845
 Leu Thr Ser Tyr Glu Leu Ile Thr Ile Asp Met Ala Ile Leu Gly Ser
 850 855 860
 Ile Asp Trp Ala Cys Leu Ile Val Asp Glu Ala His Arg Leu Lys Asn
 865 870 875 880
 Asn Gln Ser Lys Phe Phe Arg Val Leu Asn Gly Tyr Ser Leu Gln His
 885 890 895
 Lys Leu Leu Leu Thr Gly Thr Pro Leu Gln Asn Asn Leu Glu Glu Leu
 900 905 910
 Phe His Leu Leu Asn Phe Leu Thr Pro Glu Arg Phe His Asn Leu Glu
 915 920 925
 Gly Phe Leu Glu Glu Phe Ala Asp Ile Ala Lys Glu Asp Gln Ile Lys
 930 935 940
 Lys Leu His Asp Met Leu Gly Pro His Met Leu Arg Arg Leu Lys Ala
 945 950 955 960
 Asp Val Phe Lys Asn Met Pro Ser Lys Thr Glu Leu Ile Val Arg Val
 965 970 975
 Glu Leu Ser Pro Met Gln Lys Lys Tyr Tyr Lys Tyr Ile Leu Thr Arg
 980 985 990
 Asn Phe Glu Ala Leu Asn Ala Arg Gly Gly Gly Asn Gln Val Ser Leu
 995 1000 1005
 Leu Asn Val Val Met Asp Leu Lys Lys Cys Cys Asn His Pro Tyr
 1010 1015 1020
 Leu Phe Pro Val Ala Ala Met Glu Ala Pro Lys Met Pro Asn Gly

1025					1030					1035				
Met	Tyr	Asp	Gly	Ser	Ala	Leu	Ile	Arg	Ala	Ser	Gly	Lys	Leu	Leu
1040						1045					1050			
Leu	Leu	Gln	Lys	Met	Leu	Lys	Asn	Leu	Lys	Glu	Gly	Gly	His	Arg
1055						1060					1065			
Val	Leu	Ile	Phe	Ser	Gln	Met	Thr	Lys	Met	Leu	Asp	Leu	Leu	Glu
1070						1075					1080			
Asp	Phe	Leu	Glu	His	Glu	Gly	Tyr	Lys	Tyr	Glu	Arg	Ile	Asp	Gly
1085						1090					1095			
Gly	Ile	Thr	Gly	Asn	Met	Arg	Gln	Glu	Ala	Ile	Asp	Arg	Phe	Asn
1100						1105					1110			
Ala	Pro	Gly	Ala	Gln	Gln	Phe	Cys	Phe	Leu	Leu	Ser	Thr	Arg	Ala
1115						1120					1125			
Gly	Gly	Leu	Gly	Ile	Asn	Leu	Ala	Thr	Ala	Asp	Thr	Val	Ile	Ile
1130						1135					1140			
Tyr	Asp	Ser	Asp	Trp	Asn	Pro	His	Asn	Asp	Ile	Gln	Ala	Phe	Ser
1145						1150					1155			
Arg	Ala	His	Arg	Ile	Gly	Gln	Asn	Lys	Lys	Val	Met	Ile	Tyr	Arg
1160						1165					1170			
Phe	Val	Thr	Arg	Ala	Ser	Val	Glu	Glu	Arg	Ile	Thr	Gln	Val	Ala
1175						1180					1185			
Lys	Lys	Lys	Met	Met	Leu	Thr	His	Leu	Val	Val	Arg	Pro	Gly	Leu
1190						1195					1200			
Gly	Ser	Lys	Thr	Gly	Ser	Met	Ser	Lys	Gln	Glu	Leu	Asp	Asp	Ile
1205						1210					1215			
Leu	Lys	Phe	Gly	Thr	Glu	Glu	Leu	Phe	Lys	Asp	Glu	Ala	Thr	Asp
1220						1225					1230			
Gly	Gly	Gly	Asp	Asn	Lys	Glu	Gly	Glu	Asp	Ser	Ser	Val	Ile	His
1235						1240					1245			
Tyr	Asp	Asp	Lys	Ala	Ile	Glu	Arg	Leu	Leu	Asp	Arg	Asn	Gln	Asp
1250						1255					1260			

Glu Thr Glu Asp Thr Glu Leu Gln Gly Met Asn Glu Tyr Leu Ser
 1265 1270 1275
 Ser Phe Lys Val Ala Gln Tyr Val Val Arg Glu Glu Glu Met Gly
 1280 1285 1290
 Glu Glu Glu Glu Val Glu Arg Glu Ile Ile Lys Gln Glu Glu Ser
 1295 1300 1305
 Val Asp Pro Asp Tyr Trp Glu Lys Leu Leu Arg His His Tyr Glu
 1310 1315 1320
 Gln Gln Gln Glu Asp Leu Ala Arg Asn Leu Gly Lys Gly Lys Arg
 1325 1330 1335
 Ile Arg Lys Gln Val Asn Tyr Asn Asp Gly Ser Gln Glu Asp Arg
 1340 1345 1350
 Asp Trp Gln Asp Asp Gln Ser Asp Asn Gln Ser Asp Tyr Ser Val
 1355 1360 1365
 Ala Ser Glu Glu Gly Asp Glu Asp Phe Asp Glu Arg Ser Glu Ala
 1370 1375 1380
 Pro Arg Arg Pro Ser Arg Lys Gly Leu Arg Asn Asp Lys Asp Lys
 1385 1390 1395
 Pro Leu Pro Pro Leu Leu Ala Arg Val Gly Gly Asn Ile Glu Val
 1400 1405 1410
 Leu Gly Phe Asn Ala Arg Gln Arg Lys Ala Phe Leu Asn Ala Ile
 1415 1420 1425
 Met Arg Tyr Gly Met Pro Pro Gln Asp Ala Phe Thr Thr Gln Trp
 1430 1435 1440
 Leu Val Arg Asp Leu Arg Gly Lys Ser Glu Lys Glu Phe Lys Ala
 1445 1450 1455
 Tyr Val Ser Leu Phe Met Arg His Leu Cys Glu Pro Gly Ala Asp
 1460 1465 1470
 Gly Ala Glu Thr Phe Ala Asp Gly Val Pro Arg Glu Gly Leu Ser
 1475 1480 1485

Arg Gln His Val Leu Thr Arg Ile Gly Val Met Ser Leu Ile Arg
1490 1495 1500

Lys Lys Val Gln Glu Phe Glu His Val Asn Gly Arg Trp Ser Met
1505 1510 1515

Pro Glu Leu Ala Glu Val Glu Glu Asn Lys Lys Met Ser Gln Pro
1520 1525 1530

Gly Ser Pro Ser Pro Lys Thr Pro Thr Pro Ser Thr Pro Gly Asp
1535 1540 1545

Thr Gln Pro Asn Thr Pro Ala Pro Val Pro Pro Ala Glu Asp Gly
1550 1555 1560

Ile Lys Ile Glu Glu Asn Ser Leu Lys Glu Glu Glu Ser Ile Glu
1565 1570 1575

Gly Glu Lys Glu Val Lys Ser Thr Ala Pro Glu Thr Ala Ile Glu
1580 1585 1590

Cys Thr Gln Ala Pro Ala Pro Ala Ser Glu Asp Glu Lys Val Val
1595 1600 1605

Val Glu Pro Pro Glu Gly Glu Glu Lys Val Glu Lys Ala Glu Val
1610 1615 1620

Lys Glu Arg Thr Glu Glu Pro Met Glu Thr Glu Pro Lys Gly Ala
1625 1630 1635

Ala Asp Val Glu Lys Val Glu Glu Lys Ser Ala Ile Asp Leu Thr
1640 1645 1650

Pro Ile Val Val Glu Asp Lys Glu Glu Lys Lys Glu Glu Glu Glu
1655 1660 1665

Lys Lys Glu Val Met Leu Gln Asn Gly Glu Thr Pro Lys Asp Leu
1670 1675 1680

Asn Asp Glu Lys Gln Lys Lys Asn Ile Lys Gln Arg Phe Met Phe
1685 1690 1695

Asn Ile Ala Asp Gly Gly Phe Thr Glu Leu His Ser Leu Trp Gln
1700 1705 1710

Asn Glu Glu Arg Ala Ala Thr Val Thr Lys Lys Thr Tyr Glu Ile
 1715 1720 1725
 Trp His Arg Arg His Asp Tyr Trp Leu Leu Ala Gly Ile Ile Asn
 1730 1735 1740
 His Gly Tyr Ala Arg Trp Gln Asp Ile Gln Asn Asp Pro Arg Tyr
 1745 1750 1755
 Ala Ile Leu Asn Glu Pro Phe Lys Gly Glu Met Asn Arg Gly Asn
 1760 1765 1770
 Phe Leu Glu Ile Lys Asn Lys Phe Leu Ala Arg Arg Phe Lys Leu
 1775 1780 1785
 Leu Glu Gln Ala Leu Val Ile Glu Glu Gln Leu Arg Arg Ala Ala
 1790 1795 1800
 Tyr Leu Asn Met Ser Glu Asp Pro Ser His Pro Ser Met Ala Leu
 1805 1810 1815
 Asn Thr Arg Phe Ala Glu Val Glu Cys Leu Ala Glu Ser His Gln
 1820 1825 1830
 His Leu Ser Lys Glu Ser Met Ala Gly Asn Lys Pro Ala Asn Ala
 1835 1840 1845
 Val Leu His Lys Val Leu Lys Gln Leu Glu Glu Leu Leu Ser Asp
 1850 1855 1860
 Met Lys Ala Asp Val Thr Arg Leu Pro Ala Thr Ile Ala Arg Ile
 1865 1870 1875
 Pro Pro Val Ala Val Arg Leu Gln Met Ser Glu Arg Asn Ile Leu
 1880 1885 1890
 Ser Arg Leu Ala Asn Arg Ala Pro Glu Pro Thr Pro Gln Gln Val
 1895 1900 1905
 Ala Gln Gln Gln
 1910

<210> 2562
 <211> 345
 <212> PRT
 <213> Homo sapiens

<400> 2562

Met Pro Gln Arg Pro Ala Ala Ser Asn Ile Pro Val Val Gly Ser Pro
 1 5 10 15

Asn Pro Pro Ser Thr His Phe Ala Ser Gln Asn Gln His Ser Tyr Ser
 20 25 30

Ser Pro Pro Trp Ala Gly Gln His Asn Arg Lys Gly Glu Lys Asn Gly
 35 40 45

Met Gly Leu Cys Arg Leu Ser Met Lys Val Trp Glu Thr Val Gln Arg
 50 55 60

Lys Gly Thr Thr Ser Cys Gln Glu Val Val Gly Glu Leu Val Ala Lys
 65 70 75 80

Phe Arg Ala Ala Ser Asn His Ala Ser Pro Asn Glu Ser Ala Tyr Asp
 85 90 95

Val Lys Asn Ile Lys Arg Arg Thr Tyr Asp Ala Leu Asn Val Leu Met
 100 105 110

Ala Met Asn Ile Ile Ser Arg Glu Lys Lys Lys Ile Lys Trp Ile Gly
 115 120 125

Leu Thr Thr Asn Ser Ala Gln Asn Cys Gln Asn Leu Arg Val Glu Arg
 130 135 140

Gln Lys Arg Leu Glu Arg Ile Lys Gln Lys Gln Ser Glu Leu Gln Gln
 145 150 155 160

Leu Ile Leu Gln Gln Ile Ala Phe Lys Asn Leu Val Leu Arg Asn Gln
 165 170 175

Tyr Val Glu Glu Gln Val Ser Gln Arg Pro Leu Pro Asn Ser Val Ile
 180 185 190

His Val Pro Phe Ile Ile Ile Ser Ser Ser Lys Lys Thr Val Ile Asn
 195 200 205

Cys Ser Ile Ser Asp Asp Lys Ser Glu Tyr Leu Phe Lys Phe Asn Ser
 210 215 220

Ser Phe Glu Ile His Asp Asp Thr Glu Val Leu Met Trp Met Gly Met
 225 230 235 240

Thr Phe Gly Leu Glu Ser Gly Ser Cys Ser Ala Glu Asp Leu Lys Met
 245 250 255

Ala Arg Asn Leu Val Pro Lys Ala Leu Glu Pro Tyr Val Thr Glu Met
 260 265 270

Ala Gln Gly Thr Phe Gly Gly Val Phe Thr Thr Ala Gly Ser Arg Ser
 275 280 285

Asn Gly Thr Trp Leu Ser Ala Ser Asp Leu Thr Asn Ile Ala Ile Gly
 290 295 300

Met Leu Ala Thr Ser Ser Gly Gly Ser Gln Tyr Ser Gly Ser Arg Val
 305 310 315 320

Glu Thr Pro Ala Val Glu Glu Glu Glu Glu Asp Asn Asn Asp Asp
 325 330 335

Asp Leu Ser Glu Asn Asp Glu Asp Asp
 340 345

<210> 2563

<211> 553

<212> PRT

<213> Homo sapiens

<400> 2563

Met Ser Thr Glu Thr Glu Leu Gln Val Ala Val Lys Thr Ser Ala Lys
 1 5 10 15

Lys Asp Ser Arg Lys Lys Gly Gln Asp Arg Ser Glu Ala Thr Leu Ile
 20 25 30

Lys Arg Phe Lys Gly Glu Gly Val Arg Tyr Lys Ala Lys Leu Ile Gly
 35 40 45

Ile Asp Glu Val Ser Ala Ala Arg Gly Asp Lys Leu Cys Gln Asp Ser
 50 55 60

Met Met Lys Leu Lys Gly Val Val Ala Gly Ala Arg Ser Lys Gly Glu
 65 70 75 80

His Lys Gln Lys Ile Phe Leu Thr Ile Ser Phe Gly Gly Ile Lys Ile
 85 90 95

Phe Asp Glu Lys Thr Gly Ala Leu Gln His His His Ala Val His Glu

100	105	110
Ile Ser Tyr Ile Ala Lys Asp Ile Thr Asp His Arg Ala Phe Gly Tyr 115	120	125
Val Cys Gly Lys Glu Gly Asn His Arg Phe Val Ala Ile Lys Thr Ala 130	135	140
Gln Ala Ala Glu Pro Val Ile Leu Asp Leu Arg Asp Leu Phe Gln Leu 145	150	155
Ile Tyr Glu Leu Lys Gln Arg Glu Glu Leu Glu Lys Lys Ala Gln Lys 165	170	175
Asp Lys Gln Cys Glu Gln Ala Val Tyr Gln Thr Ile Leu Glu Glu Asp 180	185	190
Val Glu Asp Pro Val Tyr Gln Tyr Ile Val Phe Glu Ala Gly His Glu 195	200	205
Pro Ile Arg Asp Pro Glu Thr Glu Glu Asn Ile Tyr Gln Val Pro Thr 210	215	220
Ser Gln Lys Lys Glu Gly Val Tyr Asp Val Pro Lys Ser Gln Pro Ala 225	230	235
Val Thr Gln Leu Glu Leu Phe Gly Asp Met Ser Thr Pro Pro Asp Ile 245	250	255
Thr Ser Pro Pro Thr Pro Ala Thr Pro Gly Asp Ala Phe Ile Pro Ser 260	265	270
Ser Ser Gln Thr Leu Pro Ala Ser Ala Asp Val Phe Ser Ser Val Pro 275	280	285
Phe Gly Thr Ala Ala Val Pro Ser Gly Tyr Val Ala Met Gly Ala Val 290	295	300
Leu Pro Ser Phe Trp Gly Gln Gln Pro Leu Val Gln Gln Gln Met Val 305	310	315
Met Gly Ala Gln Pro Pro Val Ala Gln Val Met Pro Gly Ala Gln Pro 325	330	335
Ile Ala Trp Gly Gln Pro Gly Leu Phe Pro Ala Thr Gln Gln Pro Trp 340	345	350

Pro Thr Val Ala Gly Gln Phe Pro Pro Ala Ala Phe Met Pro Thr Gln
 355 360 365

Thr Val Met Pro Leu Pro Ala Ala Met Phe Gln Gly Pro Leu Thr Pro
 370 375 380

Leu Ala Thr Val Pro Gly Thr Ser Asp Ser Thr Arg Ser Ser Pro Gln
 385 390 395 400

Thr Asp Lys Pro Arg Gln Lys Met Gly Lys Glu Thr Phe Lys Asp Phe
 405 410 415

Gln Met Ala Gln Pro Pro Pro Val Pro Ser Arg Lys Pro Asp Gln Pro
 420 425 430

Ser Leu Thr Cys Thr Ser Glu Ala Phe Ser Ser Tyr Phe Asn Lys Val
 435 440 445

Gly Val Ala Gln Asp Thr Asp Asp Cys Asp Asp Phe Asp Ile Ser Gln
 450 455 460

Leu Asn Leu Thr Pro Val Thr Ser Thr Thr Pro Ser Thr Asn Ser Pro
 465 470 475 480

Pro Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser Ala Ser
 485 490 495

His Ala Ser Asp Pro Thr Thr Asp Asp Ile Phe Glu Glu Gly Phe Glu
 500 505 510

Ser Pro Ser Lys Ser Glu Glu Gln Glu Ala Pro Asp Gly Ser Gln Ala
 515 520 525

Ser Ser Asn Ser Asp Pro Phe Gly Glu Pro Ser Gly Glu Pro Ser Gly
 530 535 540

Asp Asn Ile Ser Pro Gln Ala Gly Ser
 545 550

<210> 2564
 <211> 1336
 <212> PRT
 <213> Homo sapiens
 <400> 2564

Met Glu Asn Leu Pro Ala Val Thr Thr Glu Glu Pro Thr Pro Met Gly
 1 5 10 15

Arg Gly Pro Val Gly Pro Ser Gly Gly Gly Ser Thr Arg Asp Gln Val
 20 25 30

Arg Thr Val Val Met Arg Pro Ser Val Ser Trp Glu Lys Ala Gly Pro
 35 40 45

Glu Glu Ala Lys Ala Pro Val Arg Gly Asp Glu Ala Pro Pro Ala Arg
 50 55 60

Val Ala Gly Pro Ala Ala Gly Thr Pro Pro Cys Gln Met Gly Val Tyr
 65 70 75 80

Pro Thr Asp Leu Thr Leu Gln Leu Leu Ala Val Arg Arg Lys Ser Arg
 85 90 95

Leu Arg Asp Pro Gly Leu Gln Gln Thr Leu Arg Gly Gln Leu Arg Leu
 100 105 110

Leu Glu Asn Asp Ser Arg Glu Met Ala Arg Val Leu Gly Glu Leu Ser
 115 120 125

Ala Arg Leu Leu Ser Ile His Ser Asp Gln Asp Arg Ile Val Val Thr
 130 135 140

Phe Lys Thr Phe Glu Glu Ile Trp Lys Phe Ser Thr Tyr His Ala Leu
 145 150 155 160

Gly Phe Thr His His Cys Leu Ala Asn Leu Leu Met Asp Gln Ala Phe
 165 170 175

Trp Leu Leu Leu Pro Ser Glu Glu Glu Glu Thr Ala Ile Gln Val His
 180 185 190

Val Asp Glu Asn Ala Leu Arg Leu Thr His Glu Ser Leu Leu Ile Gln
 195 200 205

Glu Gly Pro Phe Phe Val Leu Cys Pro Asp His His Val Arg Val Met
 210 215 220

Thr Gly Pro Arg Asp Ala Gly Asn Gly Pro Gln Ala Leu Arg Gln Ala
 225 230 235 240

Ser Gly Ala Pro Gln Gly Glu Ala Ala Pro Glu Thr Asp Ser Ser Pro

245

250

255

Pro Ser Pro Ser Val Ser Ser Glu Glu Val Ala Val Ala Ala Pro
 260 265 270

Glu Pro Leu Ile Pro Phe His Gln Trp Ala Leu Arg Ile Pro Gln Asp
 275 280 285

Pro Ile Asp Asp Ala Met Gly Gly Pro Val Met Pro Gly Asn Pro Leu
 290 295 300

Met Ala Val Gly Leu Ala Ser Ala Leu Ala Asp Phe Gln Gly Ser Gly
 305 310 315 320

Pro Glu Glu Met Thr Phe Arg Gly Gly Asp Leu Ile Glu Ile Leu Gly
 325 330 335

Ala Gln Val Pro Ser Leu Pro Trp Cys Val Gly Arg His Ala Ala Ser
 340 345 350

Gly Arg Val Gly Phe Val Arg Ser Ser Leu Ile Ser Met Gln Gly Pro
 355 360 365

Val Ser Glu Leu Glu Ser Ala Ile Phe Leu Asn Glu Glu Glu Lys Ser
 370 375 380

Phe Phe Ser Glu Gly Cys Phe Ser Glu Glu Asp Ala Arg Gln Leu Leu
 385 390 395 400

Arg Arg Met Ser Gly Thr Asp Val Cys Ser Val Tyr Ser Leu Asp Ser
 405 410 415

Val Glu Glu Ala Glu Thr Glu Gln Pro Gln Glu Lys Glu Ile Pro Pro
 420 425 430

Pro Cys Leu Ser Pro Glu Pro Gln Glu Thr Leu Gln Lys Val Lys Asn
 435 440 445

Val Leu Glu Gln Cys Lys Thr Cys Pro Gly Cys Pro Gln Glu Pro Ala
 450 455 460

Ser Trp Gly Leu Cys Ala Ala Ser Ser Asp Val Ser Leu Gln Asp Pro
 465 470 475 480

Glu Glu Pro Ser Phe Cys Leu Glu Ala Glu Asp Asp Trp Glu Asp Pro
 485 490 495

Glu Ala Leu Ser Ser Leu Leu Leu Phe Leu Asn Ala Pro Gly Tyr Lys
 500 505 510

Ala Ser Phe Arg Gly Leu Tyr Asp Val Ala Leu Pro Trp Leu Ser Ser
 515 520 525

Val Phe Arg Ser Phe Ser Asp Glu Glu Glu Leu Thr Gly Arg Leu Ala
 530 535 540

Gln Ala Arg Gly Ala Ala Lys Lys Ala Gly Leu Leu Met Ala Leu Ala
 545 550 555 560

Arg Leu Cys Phe Leu Leu Gly Arg Leu Cys Ser Arg Arg Leu Lys Leu
 565 570 575

Ser Gln Ala Arg Val Tyr Phe Glu Glu Ala Leu Gly Ala Leu Glu Gly
 580 585 590

Ser Phe Gly Asp Leu Phe Leu Val Val Ala Val Tyr Ala Asn Leu Ala
 595 600 605

Ser Ile Tyr Arg Lys Gln Lys Asn Arg Glu Lys Cys Ala Gln Val Val
 610 615 620

Pro Lys Ala Met Ala Leu Leu Leu Gly Thr Pro Asp His Ile Cys Ser
 625 630 635 640

Thr Glu Ala Glu Gly Glu Leu Leu Gln Leu Ala Leu Arg Arg Ala Val
 645 650 655

Gly Gly Gln Ser Leu Gln Ala Glu Ala Arg Ala Cys Phe Leu Leu Ala
 660 665 670

Arg His His Val His Leu Lys Gln Pro Glu Glu Ala Leu Pro Phe Leu
 675 680 685

Glu Arg Leu Leu Leu Leu His Arg Asp Ser Gly Ala Pro Glu Ala Ala
 690 695 700

Trp Leu Ser Asp Cys Tyr Leu Leu Leu Ala Asp Ile Tyr Ser Arg Lys
 705 710 715 720

Cys Leu Pro His Leu Val Leu Ser Cys Val Lys Val Ala Ser Leu Arg
 725 730 735

Thr Arg Gly Ser Leu Ala Gly Ser Leu Arg Ser Val Asn Leu Val Leu
 740 745 750

Gln Asn Ala Pro Gln Pro His Ser Leu Pro Ala Gln Thr Ser His Tyr
 755 760 765

Leu Arg Gln Ala Leu Ala Ser Leu Thr Pro Gly Thr Gly Gln Ala Leu
 770 775 780

Arg Gly Pro Leu Tyr Thr Ser Leu Ala Gln Leu Tyr Ser His His Gly
 785 790 795 800

Cys His Gly Pro Ala Ile Thr Phe Met Thr Gln Ala Val Glu Ala Ser
 805 810 815

Ala Ile Ala Gly Val Arg Ala Ile Val Asp His Leu Val Ala Leu Ala
 820 825 830

Trp Leu His Val Leu His Gly Gln Ser Pro Val Ala Leu Asp Ile Leu
 835 840 845

Gln Ser Val Arg Asp Ala Val Val Ala Ser Glu Asp Gln Glu Gly Val
 850 855 860

Ile Ala Asn Met Val Ala Val Ala Leu Lys Arg Thr Gly Arg Thr Arg
 865 870 875 880

Gln Ala Ala Glu Ser Tyr Tyr Arg Ala Leu Arg Val Ala Arg Asp Leu
 885 890 895

Gly Gln Gln Arg Asn Gln Ala Val Gly Leu Ala Asn Phe Gly Ala Leu
 900 905 910

Cys Leu His Ala Gly Ala Ser Arg Leu Ala Gln His Tyr Leu Leu Glu
 915 920 925

Ala Val Arg Leu Phe Ser Arg Leu Pro Leu Gly Glu Cys Gly Arg Asp
 930 935 940

Phe Thr His Val Leu Leu Gln Leu Gly His Leu Cys Thr Arg Gln Gly
 945 950 955 960

Pro Ala Gln Gln Gly Lys Gly Tyr Tyr Glu Trp Ala Leu Leu Val Ala
 965 970 975

Val Glu Met Gly His Val Glu Ser Gln Leu Arg Ala Val Gln Arg Leu
980 985 990

Cys His Phe Tyr Ser Ala Val Met Pro Ser Glu Ala Gln Cys Val Ile
995 1000 1005

Tyr His Glu Leu Gln Leu Ser Pro Ala Cys Lys Val Ala Asp Lys
1010 1015 1020

Val Leu Glu Gly Gln Leu Leu Glu Thr Ile Ser Gln Leu Tyr Leu
1025 1030 1035

Ser Leu Gly Thr Glu Arg Ala Tyr Lys Ser Ala Leu Asp Tyr Thr
1040 1045 1050

Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu Gln Lys Lys Glu Lys
1055 1060 1065

Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile Tyr Tyr Ile Leu
1070 1075 1080

Arg Gln Ser Glu Leu Val Asp Leu Tyr Ile Gln Val Ala Gln Asn
1085 1090 1095

Val Ala Leu Tyr Thr Gly Asp Pro Asn Leu Gly Leu Glu Leu Phe
1100 1105 1110

Glu Ala Ala Gly Asp Ile Phe Phe Asp Gly Ala Trp Glu Arg Glu
1115 1120 1125

Lys Ala Val Ser Phe Tyr Arg Asp Arg Ala Leu Pro Leu Ala Val
1130 1135 1140

Thr Thr Gly Asn Arg Lys Ala Glu Leu Arg Leu Cys Asn Lys Leu
1145 1150 1155

Val Ala Leu Leu Ala Thr Leu Glu Glu Pro Gln Glu Gly Leu Glu
1160 1165 1170

Phe Ala His Met Ala Leu Ala Leu Ser Ile Thr Leu Gly Asp Arg
1175 1180 1185

Leu Asn Glu Arg Val Ala Tyr His Arg Leu Ala Ala Leu Gln His
1190 1195 1200

Arg Leu Gly His Gly Glu Leu Ala Glu His Phe Tyr Leu Lys Ala

1205 1210 1215
 Leu Ser Leu Cys Asn Ser Pro Leu Glu Phe Asp Glu Glu Thr Leu
 1220 1225 1230
 Tyr Tyr Val Lys Val Tyr Leu Val Leu Gly Asp Ile Ile Phe Tyr
 1235 1240 1245
 Asp Leu Lys Asp Pro Phe Asp Ala Ala Gly Tyr Tyr Gln Leu Ala
 1250 1255 1260
 Leu Ala Ala Ala Val Asp Leu Gly Asn Lys Lys Ala Gln Leu Lys
 1265 1270 1275
 Ile Tyr Thr Arg Leu Ala Thr Ile Tyr His Asn Phe Leu Leu Asp
 1280 1285 1290
 Arg Glu Lys Ser Leu Phe Phe Tyr Gln Lys Ala Arg Thr Phe Ala
 1295 1300 1305
 Thr Glu Leu Asn Val Arg Arg Val Asn Leu Pro Pro Leu Pro Leu
 1310 1315 1320
 Cys Gly Trp Ala Pro Trp Leu Ala Pro Ser His Pro Arg
 1325 1330 1335
 <210> 2565
 <211> 93
 <212> PRT
 <213> Homo sapiens
 <400> 2565
 Met Leu Thr Glu Leu Glu Lys Ala Leu Asn Ser Ile Ile Asp Val Tyr
 1 5 10 15
 His Lys Tyr Ser Leu Ile Lys Gly Asn Phe His Ala Val Tyr Arg Asp
 20 25 30
 Asp Leu Lys Lys Leu Leu Glu Thr Glu Cys Pro Gln Tyr Ile Arg Lys
 35 40 45
 Lys Gly Ala Asp Val Trp Phe Lys Glu Leu Asp Ile Asn Thr Asp Gly
 50 55 60
 Ala Val Asn Phe Gln Glu Phe Leu Ile Leu Val Ile Lys Met Gly Val
 65 70 75 80

Ala Ala His Lys Lys Ser His Glu Glu Ser His Lys Glu
85 90

<210> 2566
<211> 1186
<212> PRT
<213> Homo sapiens

<400> 2566

Met Gly Val Gln Gly Leu Trp Lys Leu Leu Glu Cys Ser Gly Arg Gln
1 5 10 15

Val Ser Pro Glu Ala Leu Glu Gly Lys Ile Leu Ala Val Asp Ile Ser
20 25 30

Ile Trp Leu Asn Gln Ala Leu Lys Gly Val Arg Asp Arg His Gly Asn
35 40 45

Ser Ile Glu Asn Pro His Leu Leu Thr Leu Phe His Arg Leu Cys Lys
50 55 60

Leu Leu Phe Phe Arg Ile Arg Pro Ile Phe Val Phe Asp Gly Asp Ala
65 70 75 80

Pro Leu Leu Lys Lys Gln Thr Leu Val Lys Arg Arg Gln Arg Lys Asp
85 90 95

Leu Ala Ser Ser Asp Ser Arg Lys Thr Thr Glu Lys Leu Leu Lys Thr
100 105 110

Phe Leu Lys Arg Gln Ala Ile Lys Thr Ala Phe Arg Ser Lys Arg Asp
115 120 125

Glu Ala Leu Pro Ser Leu Thr Gln Val Arg Arg Glu Asn Asp Leu Tyr
130 135 140

Val Leu Pro Pro Leu Gln Glu Glu Lys His Ser Ser Glu Glu Glu
145 150 155 160

Asp Glu Lys Glu Trp Gln Glu Arg Met Asn Gln Lys Gln Ala Leu Gln
165 170 175

Glu Glu Phe Phe His Asn Pro Gln Ala Ile Asp Ile Glu Ser Glu Asp
180 185 190

Phe Ser Ser Leu Pro Pro Glu Val Lys His Glu Ile Leu Thr Asp Met

195	200	205
Lys Glu Phe Thr Lys Arg Arg Arg Thr Leu Phe Glu Ala Met Pro Glu 210	215	220
Glu Ser Asp Asp Phe Ser Ser Gln Tyr Gln Leu Lys Gly Leu Leu Lys Lys 225	230	235 240
Asn Tyr Leu Asn Gln His Ile Glu His Val Gln Lys Glu Met Asn Gln 245	250	255
Gln His Ser Gly His Ile Arg Arg Gln Tyr Glu Asp Glu Gly Gly Phe 260	265	270
Leu Lys Glu Val Glu Ser Arg Arg Val Val Ser Glu Asp Thr Ser His 275	280	285
Tyr Ile Leu Ile Lys Gly Ile Gln Ala Lys Thr Val Ala Glu Val Asp 290	295	300
Ser Glu Ser Leu Pro Ser Ser Ser Lys Met His Gly Met Ser Phe Asp 305	310	315 320
Val Lys Ser Ser Pro Cys Glu Lys Leu Lys Thr Glu Lys Glu Pro Asp 325	330	335
Ala Thr Pro Pro Ser Pro Arg Thr Leu Leu Ala Met Gln Ala Ala Leu 340	345	350
Leu Gly Ser Ser Ser Glu Glu Glu Leu Glu Ser Glu Asn Arg Arg Gln 355	360	365
Ala Arg Gly Arg Asn Ala Pro Ala Ala Val Asp Glu Gly Ser Ile Ser 370	375	380
Pro Arg Thr Leu Ser Ala Ile Lys Arg Ala Leu Asp Asp Asp Glu Asp 385	390	395 400
Val Lys Val Cys Ala Gly Asp Asp Val Gln Thr Gly Gly Pro Gly Ala 405	410	415
Glu Glu Met Arg Ile Asn Ser Ser Thr Glu Asn Ser Asp Glu Gly Leu 420	425	430
Lys Val Arg Asp Gly Lys Gly Ile Pro Phe Thr Ala Thr Leu Ala Ser 435	440	445

Ser Ser Val Asn Ser Ala Glu Glu His Val Ala Ser Thr Asn Glu Gly
 450 455 460

Arg Glu Pro Thr Asp Ser Val Pro Lys Glu Gln Met Ser Leu Val His
 465 470 475 480

Val Gly Thr Glu Ala Phe Pro Ile Ser Asp Glu Ser Met Ile Lys Asp
 485 490 495

Arg Lys Asp Arg Leu Pro Leu Glu Ser Ala Val Val Arg His Ser Asp
 500 505 510

Ala Pro Gly Leu Pro Asn Gly Arg Glu Leu Thr Pro Ala Ser Pro Thr
 515 520 525

Cys Thr Asn Ser Val Ser Lys Asn Glu Thr His Ala Glu Val Leu Glu
 530 535 540

Gln Gln Asn Glu Leu Cys Pro Tyr Glu Ser Lys Phe Asp Ser Ser Leu
 545 550 555 560

Leu Ser Ser Asp Asp Glu Thr Lys Cys Lys Pro Asn Ser Ala Ser Glu
 565 570 575

Val Ile Gly Pro Val Ser Leu Gln Glu Thr Ser Ser Ile Val Ser Val
 580 585 590

Pro Ser Glu Ala Val Asp Asn Val Glu Asn Val Val Ser Phe Asn Ala
 595 600 605

Lys Glu His Glu Asn Phe Leu Glu Thr Ile Gln Glu Gln Gln Thr Thr
 610 615 620

Glu Ser Ala Gly Gln Asp Leu Ile Ser Ile Pro Lys Ala Val Glu Pro
 625 630 635 640

Met Glu Ile Asp Ser Glu Glu Ser Glu Ser Asp Gly Ser Phe Ile Glu
 645 650 655

Val Gln Ser Val Ile Ser Asp Glu Glu Leu Gln Ala Glu Phe Pro Glu
 660 665 670

Thr Ser Lys Pro Pro Ser Glu Gln Gly Glu Glu Glu Leu Val Gly Thr
 675 680 685

Arg Glu Gly Glu Ala Pro Ala Glu Ser Glu Ser Leu Leu Arg Asp Asn
 690 695 700

Ser Glu Arg Asp Asp Val Asp Gly Glu Pro Gln Glu Ala Glu Lys Asp
 705 710 715 720

Ala Glu Asp Ser Leu His Glu Trp Gln Asp Ile Asn Leu Glu Glu Leu
 725 730 735

Glu Thr Leu Glu Ser Asn Leu Leu Ala Gln Gln Asn Ser Leu Lys Ala
 740 745 750

Gln Lys Gln Gln Gln Glu Arg Ile Ala Ala Thr Val Thr Gly Gln Met
 755 760 765

Phe Leu Glu Ser Gln Glu Leu Leu Arg Leu Phe Gly Ile Pro Tyr Ile
 770 775 780

Gln Ala Pro Met Glu Ala Glu Ala Gln Cys Ala Ile Leu Asp Leu Thr
 785 790 795 800

Asp Gln Thr Ser Gly Thr Ile Thr Asp Asp Ser Asp Ile Trp Leu Phe
 805 810 815

Gly Ala Arg His Val Tyr Arg Asn Phe Phe Asn Lys Asn Lys Phe Val
 820 825 830

Glu Tyr Tyr Gln Tyr Val Asp Phe His Asn Gln Leu Gly Leu Asp Arg
 835 840 845

Asn Lys Leu Ile Asn Leu Ala Tyr Leu Leu Gly Ser Asp Tyr Thr Glu
 850 855 860

Gly Ile Pro Thr Val Gly Cys Val Thr Ala Met Glu Ile Leu Asn Glu
 865 870 875 880

Phe Pro Gly His Gly Leu Glu Pro Leu Leu Lys Phe Ser Glu Trp Trp
 885 890 895

His Glu Ala Gln Lys Asn Pro Lys Ile Arg Pro Asn Pro His Asp Thr
 900 905 910

Lys Val Lys Lys Lys Leu Arg Thr Leu Gln Leu Thr Pro Gly Phe Pro
 915 920 925

Asn Pro Ala Val Ala Glu Ala Tyr Leu Lys Pro Val Val Asp Asp Ser
 930 935 940

Lys Gly Ser Phe Leu Trp Gly Lys Pro Asp Leu Asp Lys Ile Arg Glu
 945 950 955 960

Phe Cys Gln Arg Tyr Phe Gly Trp Asn Arg Thr Lys Thr Asp Glu Ser
 965 970 975

Leu Phe Pro Val Leu Lys Gln Leu Asp Ala Gln Gln Thr Gln Leu Arg
 980 985 990

Ile Asp Ser Phe Phe Arg Leu Ala Gln Gln Glu Lys Glu Asp Ala Lys
 995 1000 1005

Arg Ile Lys Ser Gln Arg Leu Asn Arg Ala Val Thr Cys Met Leu
 1010 1015 1020

Arg Lys Glu Lys Glu Ala Ala Ala Ser Glu Ile Glu Ala Val Ser
 1025 1030 1035

Val Ala Met Glu Lys Glu Phe Glu Leu Leu Asp Lys Ala Lys Arg
 1040 1045 1050

Lys Thr Gln Lys Arg Gly Ile Thr Asn Thr Leu Glu Glu Ser Ser
 1055 1060 1065

Ser Leu Lys Arg Lys Arg Leu Ser Asp Ser Lys Arg Lys Asn Thr
 1070 1075 1080

Cys Gly Gly Phe Leu Gly Glu Thr Cys Leu Ser Glu Ser Ser Asp
 1085 1090 1095

Gly Ser Ser Ser Glu His Ala Glu Ser Ser Ser Leu Met Asn Val
 1100 1105 1110

Gln Arg Arg Thr Ala Ala Lys Glu Pro Lys Thr Ser Ala Ser Asp
 1115 1120 1125

Ser Gln Asn Ser Val Lys Glu Ala Pro Val Lys Asn Gly Gly Ala
 1130 1135 1140

Thr Thr Ser Ser Ser Ser Asp Ser Asp Asp Asp Gly Gly Lys Glu
 1145 1150 1155

Lys Met Val Leu Val Thr Ala Arg Ser Val Phe Gly Lys Lys Arg

1160

1165

1170

Arg Lys Leu Arg Arg Ala Arg Gly Arg Lys Arg Lys Thr
 1175 1180 1185

<210> 2567

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2567

Met Pro Leu Ala Lys Asp Leu Leu His Pro Ser Pro Glu Glu Glu Lys
 1 5 10 15

Arg Lys His Lys Lys Lys Arg Leu Val Gln Ser Pro Asn Ser Tyr Phe
 20 25 30

Met Asp Val Lys Cys Pro Gly Cys Tyr Lys Ile Thr Thr Val Phe Ser
 35 40 45

His Ala Gln Thr Val Val Leu Cys Val Gly Cys Ser Thr Val Leu Cys
 50 55 60

Gln Pro Thr Gly Gly Lys Ala Arg Leu Thr Glu Gly Cys Ser Phe Arg
 65 70 75 80

Arg Lys Gln His

<210> 2568

<211> 691

<212> PRT

<213> Homo sapiens

<400> 2568

Met Asp Gly Cys Lys Lys Glu Leu Pro Arg Leu Gln Glu Pro Glu Glu
 1 5 10 15

Asp Glu Asp Cys Tyr Ile Leu Asn Val Gln Ser Ser Ser Asp Asp Thr
 20 25 30

Ser Gly Ser Ser Val Ala Arg Arg Ala Pro Lys Arg Gln Ala Ser Cys
 35 40 45

Ile Leu Asn Val Gln Ser Arg Ser Gly Asp Thr Ser Gly Ser Ser Val
 50 55 60

Ala Arg Arg Ala Pro Lys Arg Gln Ala Ser Ser Val Val Val Ile Asp
65 70 75 80

Ser Asp Ser Asp Glu Glu Cys His Thr His Glu Glu Lys Lys Ala Lys
85 90 95

Leu Leu Glu Ile Asn Ser Asp Asp Glu Ser Pro Glu Cys Cys His Val
100 105 110

Lys Pro Ala Ile Gln Glu Pro Pro Ile Val Ile Ser Asp Asp Asp Asp
115 120 125

Asp Asp Asp Asn Gly Asn Asp Leu Glu Val Pro Asp Asp Asn Ser Asp
130 135 140

Asp Ser Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser Glu Ala Pro Asp
145 150 155 160

Asp Asn Ser Asp Asp Ser Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser
165 170 175

Glu Ala Pro Asp Asp Asn Ser Asp Asp Ser Asp Val Pro Asp Asp Asn
180 185 190

Ser Asp Asp Ser Ser Asp Asp Asn Ser Asp Asp Ser Ser Asp Asp Asn
195 200 205

Ser Asp Asp Ser Asp Val Pro Asp Asp Lys Ser Asp Asp Ser Asp Val
210 215 220

Pro Asp Asp Ser Ser Asp Asp Ser Asp Val Pro Asp Asp Ser Ser Asp
225 230 235 240

Asp Ser Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser Glu Ala Pro Asp
245 250 255

Asp Ser Ser Asp Asp Ser Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser
260 265 270

Glu Ala Pro Asp Asp Ser Ser Asp Asp Ser Glu Ala Ser Asp Asp Ser
275 280 285

Ser Asp Asp Ser Glu Ala Ser Asp Asp Ser Ser Asp Asp Ser Glu Ala
290 295 300

Pro Asp Asp Lys Ser Asp Asp Ser Asp Val Pro Glu Asp Lys Ser Asp

305

310

315

320

Asp Ser Asp Val Pro Asp Asp Asn Ser Asp Asp Leu Glu Val Pro Val
325 330 335

Pro Ala Glu Asp Leu Cys Asn Glu Gly Gln Ile Ala Ser Asp Glu Glu
340 345 350

Glu Leu Val Glu Ala Ala Ala Ala Val Ser Gln His Asp Ser Ser Asp
355 360 365

Asp Ala Gly Glu Gln Asp Leu Gly Glu Asn Leu Ser Lys Pro Pro Ser
370 375 380

Asp Pro Glu Ala Asn Pro Glu Val Ser Glu Arg Lys Leu Pro Thr Glu
385 390 395 400

Glu Glu Pro Ala Pro Val Val Glu Gln Ser Gly Lys Arg Lys Ser Lys
405 410 415

Thr Lys Thr Ile Val Glu Pro Pro Arg Lys Arg Gln Thr Lys Thr Lys
420 425 430

Asn Ile Val Glu Pro Pro Arg Lys Arg Gln Thr Lys Thr Lys Asn Ile
435 440 445

Val Glu Pro Leu Arg Lys Arg Lys Ala Lys Thr Lys Asn Val Ser Val
450 455 460

Thr Pro Gly His Lys Lys Arg Gly Pro Ser Lys Lys Lys Pro Gly Ala
465 470 475 480

Ala Lys Val Glu Lys Arg Lys Thr Arg Thr Pro Lys Cys Lys Val Pro
485 490 495

Gly Cys Phe Leu Gln Asp Leu Glu Lys Ser Lys Lys Tyr Ser Gly Lys
500 505 510

Asn Leu Lys Arg Asn Lys Asp Glu Leu Val Gln Arg Ile Tyr Asp Leu
515 520 525

Phe Asn Arg Ser Val Cys Asp Lys Lys Leu Pro Glu Lys Leu Arg Ile
530 535 540

Gly Trp Asn Asn Lys Met Val Lys Thr Ala Gly Leu Cys Ser Thr Gly
545 550 555 560

Glu Met Trp Tyr Pro Lys Trp Arg Arg Phe Ala Lys Ile Gln Ile Gly
 565 570 575

Leu Lys Val Cys Asp Ser Ala Asp Arg Ile Arg Asp Thr Leu Ile His
 580 585 590

Glu Met Cys His Ala Ala Ser Trp Leu Ile Asp Gly Ile His Asp Ser
 595 600 605

His Gly Asp Ala Trp Lys Tyr Tyr Ala Arg Lys Ser Asn Arg Ile His
 610 615 620

Pro Glu Leu Pro Arg Val Thr Arg Cys His Asn Tyr Lys Ile Asn Tyr
 625 630 635 640

Lys Val His Tyr Glu Cys Thr Gly Cys Lys Thr Arg Ile Gly Cys Tyr
 645 650 655

Thr Lys Ser Leu Asp Thr Ser Arg Phe Ile Cys Ala Lys Cys Lys Gly
 660 665 670

Ser Leu Val Met Val Pro Leu Thr Gln Lys Asp Gly Thr Arg Ile Val
 675 680 685

Pro His Val
 690

<210> 2569

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2569

Met Ser Asp Gln Glu Ala Lys Pro Ser Thr Glu Asp Leu Gly Asp Lys
 1 5 10 15

Lys Glu Gly Glu Tyr Ile Lys Leu Lys Val Ile Gly Gln Asp Ser Ser
 20 25 30

Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu Lys Lys Leu Lys
 35 40 45

Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn Ser Leu Arg Phe
 50 55 60

Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Lys Glu Leu
 65 70 75 80

Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Thr Gly
 85 90 95

Gly His Ser Thr Val
 100

<210> 2570
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 2570

Met Ser Gly Leu Arg Val Tyr Ser Thr Ser Val Thr Gly Ser Arg Glu
 1 5 10 15

Ile Lys Ser Gln Gln Ser Glu Val Thr Arg Ile Leu Asp Gly Lys Arg
 20 25 30

Ile Gln Tyr Gln Leu Val Asp Ile Ser Gln Asp Asn Ala Leu Arg Asp
 35 40 45

Glu Met Arg Ala Leu Ala Gly Asn Pro Lys Ala Thr Pro Pro Gln Ile
 50 55 60

Val Asn Gly Asp Gln Tyr Cys Gly Asp Tyr Glu Leu Phe Val Glu Ala
 65 70 75 80

Val Glu Gln Asn Thr Leu Gln Glu Phe Leu Lys Leu Ala
 85 90

<210> 2571
 <211> 666
 <212> PRT
 <213> Homo sapiens

<400> 2571

Met Thr Pro Pro Pro Pro Gly Arg Ala Ala Pro Ser Ala Pro Arg Ala
 1 5 10 15

Arg Val Pro Gly Pro Pro Ala Arg Leu Gly Leu Pro Leu Arg Leu Arg
 20 25 30

Leu Leu Leu Leu Leu Trp Ala Ala Ala Ala Ser Ala Gln Gly His Leu
 35 40 45

Arg Ser Gly Pro Arg Ile Phe Ala Val Trp Lys Gly His Val Gly Gln
 50 55 60

Asp Arg Val Asp Phe Gly Gln Thr Glu Pro His Thr Val Leu Phe His
 65 70 75 80

Glu Pro Gly Ser Ser Ser Val Trp Val Gly Gly Arg Gly Lys Val Tyr
 85 90 95

Leu Phe Asp Phe Pro Glu Gly Lys Asn Ala Ser Val Arg Thr Val Asn
 100 105 110

Ile Gly Ser Thr Lys Gly Ser Cys Leu Asp Lys Arg Asp Cys Glu Asn
 115 120 125

Tyr Ile Thr Leu Leu Glu Arg Arg Ser Glu Gly Leu Leu Ala Cys Gly
 130 135 140

Thr Asn Ala Arg His Pro Ser Cys Trp Asn Leu Val Asn Gly Thr Val
 145 150 155 160

Val Pro Leu Gly Glu Met Arg Gly Tyr Ala Pro Phe Ser Pro Asp Glu
 165 170 175

Asn Ser Leu Val Leu Phe Glu Gly Asp Glu Val Tyr Ser Thr Ile Arg
 180 185 190

Lys Gln Glu Tyr Asn Gly Lys Ile Pro Arg Phe Arg Arg Ile Arg Gly
 195 200 205

Glu Ser Glu Leu Tyr Thr Ser Asp Thr Val Met Gln Asn Pro Gln Phe
 210 215 220

Ile Lys Ala Thr Ile Val His Gln Asp Gln Ala Tyr Asp Asp Lys Ile
 225 230 235 240

Tyr Tyr Phe Phe Arg Glu Asp Asn Pro Asp Lys Asn Pro Glu Ala Pro
 245 250 255

Leu Asn Val Ser Arg Val Ala Gln Leu Cys Arg Gly Asp Gln Gly Gly
 260 265 270

Glu Ser Ser Leu Ser Val Ser Lys Trp Asn Thr Phe Leu Lys Ala Met
 275 280 285

Leu Val Cys Ser Asp Ala Ala Thr Asn Lys Asn Phe Asn Arg Leu Gln
 290 295 300

Asp Val Phe Leu Leu Pro Asp Pro Ser Gly Gln Trp Arg Asp Thr Arg
 305 310 315 320

Val Tyr Gly Val Phe Ser Asn Pro Trp Asn Tyr Ser Ala Val Cys Val
 325 330 335

Tyr Ser Leu Gly Asp Ile Asp Lys Val Phe Arg Thr Ser Ser Leu Lys
 340 345 350

Gly Tyr His Ser Ser Leu Pro Asn Pro Arg Pro Gly Lys Cys Leu Pro
 355 360 365

Asp Gln Gln Pro Ile Pro Thr Glu Thr Phe Gln Val Ala Asp Arg His
 370 375 380

Pro Glu Val Ala Gln Arg Val Glu Pro Met Gly Pro Leu Lys Thr Pro
 385 390 395 400

Leu Phe His Ser Lys Tyr His Tyr Gln Lys Val Ala Val His Arg Met
 405 410 415

Gln Ala Ser His Gly Glu Thr Phe His Val Leu Tyr Leu Thr Thr Asp
 420 425 430

Arg Gly Thr Ile His Lys Val Val Glu Pro Gly Glu Gln Glu His Ser
 435 440 445

Phe Ala Phe Asn Ile Met Glu Ile Gln Pro Phe Arg Arg Ala Ala Ala
 450 455 460

Ile Gln Thr Met Ser Leu Asp Ala Glu Arg Arg Lys Leu Tyr Val Ser
 465 470 475 480

Ser Gln Trp Glu Val Ser Gln Val Pro Leu Asp Leu Cys Glu Val Tyr
 485 490 495

Gly Gly Gly Cys His Gly Cys Leu Met Ser Arg Asp Pro Tyr Cys Gly
 500 505 510

Trp Asp Gln Gly Arg Cys Ile Ser Ile Tyr Ser Ser Glu Arg Ser Val
 515 520 525

Leu Gln Ser Ile Asn Pro Ala Glu Pro His Lys Glu Cys Pro Asn Pro

530

535

540

Lys Pro Asp Lys Ala Pro Leu Gln Lys Val Ser Leu Ala Pro Asn Ser
 545 550 555 560

Arg Tyr Tyr Leu Ser Cys Pro Met Glu Ser Arg His Ala Thr Tyr Ser
 565 570 575

Trp Arg His Lys Glu Asn Val Glu Gln Ser Cys Glu Pro Gly His Gln
 580 585 590

Ser Pro Asn Cys Ile Leu Phe Ile Glu Asn Leu Thr Ala Gln Gln Tyr
 595 600 605

Gly His Tyr Phe Cys Glu Ala Gln Glu Gly Ser Tyr Phe Arg Glu Ala
 610 615 620

Gln His Trp Gln Leu Leu Pro Glu Asp Gly Ile Met Ala Glu His Leu
 625 630 635 640

Leu Gly His Ala Cys Ala Leu Ala Ala Ser Leu Trp Leu Gly Val Leu
 645 650 655

Pro Thr Leu Thr Leu Gly Leu Leu Val His
 660 665

<210> 2572

<211> 162

<212> PRT

<213> Homo sapiens

<400> 2572

Met Arg Ser Ser Pro Gly Asn Met Glu Arg Ile Val Ile Cys Leu Met
 1 5 10 15

Val Ile Phe Leu Gly Thr Leu Val His Lys Ser Ser Ser Gln Gly Gln
 20 25 30

Asp Arg His Met Ile Arg Met Arg Gln Leu Ile Asp Ile Val Asp Gln
 35 40 45

Leu Lys Asn Tyr Val Asn Asp Leu Val Pro Glu Phe Leu Pro Ala Pro
 50 55 60

Glu Asp Val Glu Thr Asn Cys Glu Trp Ser Ala Phe Ser Cys Phe Gln
 65 70 75 80

Lys Ala Gln Leu Lys Ser Ala Asn Thr Gly Asn Asn Glu Arg Ile Ile
85 90 95

Asn Val Ser Ile Lys Lys Leu Lys Arg Lys Pro Pro Ser Thr Asn Ala
100 105 110

Gly Arg Arg Gln Lys His Arg Leu Thr Cys Pro Ser Cys Asp Ser Tyr
115 120 125

Glu Lys Lys Pro Pro Lys Glu Phe Leu Glu Arg Phe Lys Ser Leu Leu
130 135 140

Gln Lys Met Ile His Gln His Leu Ser Ser Arg Thr His Gly Ser Glu
145 150 155 160

Asp Ser

<210> 2573

<211> 1050

<212> PRT

<213> Homo sapiens

<400> 2573

Met Leu Cys Trp Gly Tyr Trp Ser Leu Gly Gln Pro Gly Ile Ser Thr
1 5 10 15

Asn Leu Gln Gly Ile Val Ala Glu Pro Gln Val Cys Gly Phe Ile Ser
20 25 30

Asp Arg Ser Val Lys Glu Val Ala Cys Gly Gly Asn His Ser Val Phe
35 40 45

Leu Leu Glu Asp Gly Glu Val Tyr Thr Cys Gly Leu Asn Thr Lys Gly
50 55 60

Gln Leu Gly His Glu Arg Glu Gly Asn Lys Pro Glu Gln Ile Gly Ala
65 70 75 80

Leu Ala Asp Gln His Ile Ile His Val Ala Cys Gly Glu Ser His Ser
85 90 95

Leu Ala Leu Ser Asp Arg Gly Gln Leu Phe Ser Trp Gly Ala Gly Ser
100 105 110

Asp Gly Gln Leu Gly Leu Met Thr Thr Glu Asp Ser Val Ala Val Pro

115

120

125

Arg Leu Ile Gln Lys Leu Asn Gln Gln Thr Ile Leu Gln Val Ser Cys
130 135 140

Gly Asn Trp His Cys Leu Ala Leu Ala Ala Asp Gly Gln Phe Phe Thr
145 150 155 160

Trp Gly Lys Asn Ser His Gly Gln Leu Gly Leu Gly Lys Glu Phe Pro
165 170 175

Ser Gln Ala Ser Pro Gln Arg Val Arg Ser Leu Glu Gly Ile Pro Leu
180 185 190

Ala Gln Val Ala Ala Gly Gly Ala His Ser Phe Ala Leu Ser Leu Ser
195 200 205

Gly Ala Val Phe Gly Trp Gly Met Asn Asn Ala Gly Gln Leu Gly Leu
210 215 220

Ser Asp Glu Lys Asp Arg Glu Ser Pro Cys His Val Lys Leu Leu Arg
225 230 235 240

Thr Gln Lys Val Val Tyr Ile Ser Cys Gly Glu Glu His Thr Ala Val
245 250 255

Leu Thr Lys Ser Gly Gly Val Phe Thr Phe Gly Ala Gly Ser Cys Gly
260 265 270

Gln Leu Gly His Asp Ser Met Asn Asp Glu Val Asn Pro Arg Arg Val
275 280 285

Leu Glu Leu Met Gly Ser Glu Val Thr Gln Ile Ala Cys Gly Arg Gln
290 295 300

His Thr Leu Ala Phe Val Pro Ser Ser Gly Leu Ile Tyr Ala Phe Gly
305 310 315 320

Cys Gly Ala Arg Gly Gln Leu Gly Thr Gly His Thr Cys Asn Val Lys
325 330 335

Cys Pro Ser Pro Val Lys Gly Tyr Trp Ala Ala His Ser Gly Gln Leu
340 345 350

Ser Ala Arg Ala Asp Arg Phe Lys Tyr His Ile Val Lys Gln Ile Phe
355 360 365

Ser Gly Gly Asp Gln Thr Phe Val Leu Cys Ser Lys Tyr Glu Asn Tyr
 370 375 380

Ser Pro Ala Val Asp Phe Arg Thr Met Asn Gln Ala His Tyr Thr Ser
 385 390 395 400

Leu Ile Asn Asp Glu Thr Ile Ala Val Trp Arg Gln Lys Leu Ser Glu
 405 410 415

His Asn Asn Ala Asn Thr Ile Asn Gly Val Val Gln Ile Leu Ser Ser
 420 425 430

Ala Ala Cys Trp Asn Gly Ser Phe Leu Glu Lys Lys Ile Asp Glu His
 435 440 445

Phe Lys Thr Ser Pro Lys Ile Pro Gly Ile Asp Leu Asn Ser Thr Arg
 450 455 460

Val Leu Phe Glu Lys Leu Met Asn Ser Gln His Ser Met Ile Leu Glu
 465 470 475 480

Gln Ile Leu Asn Ser Phe Glu Ser Cys Leu Ile Pro Gln Leu Ser Ser
 485 490 495

Ser Pro Pro Asp Val Glu Ala Met Arg Ile Tyr Leu Ile Leu Pro Glu
 500 505 510

Phe Pro Leu Leu Gln Asp Ser Lys Tyr Tyr Ile Thr Leu Thr Ile Pro
 515 520 525

Leu Ala Met Ala Ile Leu Arg Leu Asp Thr Asn Pro Ser Lys Val Leu
 530 535 540

Asp Asn Trp Trp Ser Gln Val Cys Pro Lys Tyr Phe Met Lys Leu Val
 545 550 555 560

Asn Leu Tyr Lys Gly Ala Val Leu Tyr Leu Leu Arg Gly Arg Lys Thr
 565 570 575

Phe Leu Ile Pro Val Leu Phe Asn Asn Tyr Ile Thr Ala Ala Leu Lys
 580 585 590

Leu Leu Glu Lys Leu Tyr Lys Val Asn Leu Lys Val Lys His Val Glu
 595 600 605

Tyr Asp Thr Phe Tyr Ile Pro Glu Ile Ser Asn Leu Val Asp Ile Gln
 610 615 620

Glu Asp Tyr Leu Met Trp Phe Leu His Gln Ala Gly Met Lys Ala Arg
 625 630 635 640

Pro Ser Ile Ile Gln Asp Thr Val Thr Leu Cys Ser Tyr Pro Phe Ile
 645 650 655

Phe Asp Ala Gln Ala Lys Thr Lys Met Leu Gln Thr Asp Ala Glu Leu
 660 665 670

Gln Met Gln Val Ala Val Asn Gly Ala Asn Leu Gln Asn Val Phe Met
 675 680 685

Leu Leu Thr Leu Glu Pro Leu Leu Ala Arg Ser Pro Phe Leu Val Leu
 690 695 700

His Val Arg Arg Asn Asn Leu Val Gly Asp Ala Leu Arg Glu Leu Ser
 705 710 715 720

Ile His Ser Asp Ile Asp Leu Lys Lys Pro Leu Lys Val Ile Phe Asp
 725 730 735

Gly Glu Glu Ala Val Asp Ala Gly Gly Val Thr Lys Glu Phe Phe Leu
 740 745 750

Leu Leu Leu Lys Glu Leu Leu Asn Pro Ile Tyr Gly Met Phe Thr Tyr
 755 760 765

Tyr Gln Asp Ser Asn Leu Leu Trp Phe Ser Asp Thr Cys Phe Val Glu
 770 775 780

His Asn Trp Phe His Leu Ile Gly Ile Thr Cys Gly Leu Ala Ile Tyr
 785 790 795 800

Asn Ser Thr Val Val Asp Leu His Phe Pro Leu Ala Leu Tyr Lys Lys
 805 810 815

Leu Leu Asn Val Lys Pro Gly Leu Glu Asp Leu Lys Glu Leu Ser Pro
 820 825 830

Thr Glu Gly Arg Ser Leu Gln Glu Leu Leu Asp Tyr Pro Gly Glu Asp
 835 840 845

Val Glu Glu Thr Phe Cys Leu Asn Phe Thr Ile Cys Arg Glu Ser Tyr
 850 855 860

Gly Val Ile Glu Gln Lys Lys Leu Ile Pro Gly Gly Asp Asn Val Thr
 865 870 875 880

Val Cys Lys Asp Asn Arg Gln Glu Phe Val Asp Ala Tyr Val Asn Tyr
 885 890 895

Val Phe Gln Ile Ser Val His Glu Trp Tyr Thr Ala Phe Ser Ser Gly
 900 905 910

Phe Leu Lys Val Cys Gly Gly Lys Val Leu Glu Leu Phe Gln Pro Ser
 915 920 925

Glu Leu Arg Ala Met Met Val Gly Asn Ser Asn Tyr Asn Trp Glu Glu
 930 935 940

Leu Glu Glu Thr Ala Ile Tyr Lys Gly Asp Tyr Ser Ala Thr His Pro
 945 950 955 960

Thr Val Lys Leu Phe Trp Glu Thr Phe His Glu Phe Pro Leu Glu Lys
 965 970 975

Lys Lys Lys Phe Leu Leu Phe Leu Thr Gly Ser Asp Arg Ile Pro Ile
 980 985 990

Tyr Gly Met Ala Ser Leu Gln Ile Val Ile Gln Ser Thr Ala Ser Gly
 995 1000 1005

Glu Glu Tyr Leu Pro Val Ala His Thr Cys Tyr Asn Leu Leu Asp
 1010 1015 1020

Leu Pro Lys Tyr Ser Ser Lys Glu Ile Leu Ser Ala Arg Leu Thr
 1025 1030 1035

Gln Ala Leu Asp Asn Tyr Glu Gly Phe Ser Leu Ala
 1040 1045 1050

<210> 2574

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2574

Met Arg Ala Cys Ile Ser Leu Val Leu Ala Val Leu Cys Gly Leu Ala
 1 5 10 15

Trp Ala Glu Asp His Lys Glu Ser Glu Pro Leu Pro Gln Leu Glu Glu
20 25 30

Glu Thr Glu Glu Ala Leu Ala Ser Asn Leu Tyr Ser Ala Pro Thr Ser
35 40 45

Cys Gln Gly Arg Cys Tyr Glu Ala Phe Asp Lys His His Gln Cys His
50 55 60

Cys Asn Ala Arg Cys Gln Glu Phe Gly Asn Cys Cys Lys Asp Phe Glu
65 70 75 80

Ser Leu Cys Ser Asp His Glu Val Ser His Ser Ser Asp Ala Ile Thr
85 90 95

Lys Glu Glu Ile Gln Ser Ile Ser Glu Lys Ile Tyr Arg Ala Asp Thr
100 105 110

Asn Lys Ala Gln Lys Glu Asp Ile Val Leu Asn Ser Gln Asn Cys Ile
115 120 125

Ser Pro Ser Glu Thr Arg Asn Gln Val Asp Arg Cys Pro Lys Pro Leu
130 135 140

Phe Thr Tyr Val Asn Glu Lys Leu Phe Ser Lys Pro Thr Tyr Ala Ala
145 150 155 160

Phe Ile Asn Leu Leu Asn Asn Tyr Gln Arg Ala Thr Gly His Gly Glu
165 170 175

His Phe Ser Ala Gln Glu Leu Ala Glu Gln Asp Ala Phe Leu Arg Glu
180 185 190

Ile Met Lys Thr Ala Val Met Lys Glu Leu Tyr Ser Phe Leu His His
195 200 205

Gln Asn Arg Tyr Gly Ser Glu Gln Glu Phe Val Asp Asp Leu Lys Asn
210 215 220

Met Trp Phe Gly Leu Tyr Ser Arg Gly Asn Glu Glu Gly Asp Ser Ser
225 230 235 240

Gly Phe Glu His Val Phe Ser Gly Glu Val Lys Lys Gly Lys Val Thr
245 250 255

Gly Phe His Asn Trp Ile Arg Phe Tyr Leu Glu Glu Lys Glu Gly Leu
 260 265 270

Val Asp Tyr Tyr Ser His Ile Tyr Asp Gly Pro Trp Asp Ser Tyr Pro
 275 280 285

Asp Val Leu Ala Met Gln Phe Asn Trp Asp Gly Tyr Tyr Lys Glu Val
 290 295 300

Gly Ser Ala Phe Ile Gly Ser Ser Pro Glu Phe Glu Phe Ala Leu Tyr
 305 310 315 320

Ser Leu Cys Phe Ile Ala Arg Pro Gly Lys Val Cys Gln Leu Ser Leu
 325 330 335

Gly Gly Tyr Pro Leu Ala Val Arg Thr Tyr Thr Trp Asp Lys Ser Thr
 340 345 350

Tyr Gly Asn Gly Lys Lys Tyr Ile Ala Thr Ala Tyr Ile Val Ser Ser
 355 360 365

Thr

<210> 2575

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2575

Met Asp Pro Leu Arg Ala Gln Gln Leu Ala Ala Glu Leu Glu Val Glu
 1 5 10 15

Met Met Ala Asp Met Tyr Asn Arg Met Thr Ser Ala Cys His Arg Lys
 20 25 30

Cys Val Pro Pro His Tyr Lys Glu Ala Glu Leu Ser Lys Gly Glu Ser
 35 40 45

Val Cys Leu Asp Arg Cys Val Ser Lys Tyr Leu Asp Ile His Glu Arg
 50 55 60

Met Gly Lys Lys Leu Thr Glu Leu Ser Met Gln Asp Glu Glu Leu Met
 65 70 75 80

Lys Arg Val Gln Gln Ser Ser Gly Pro Ala

85

90

<210> 2576

<211> 426

<212> PRT

<213> Homo sapiens

<400> 2576

Met Ala Asn Asp Ser Gly Gly Pro Gly Gly Pro Ser Pro Ser Glu Arg
 1 5 10 15

Asp Arg Gln Tyr Cys Glu Leu Cys Gly Lys Met Glu Asn Leu Leu Arg
 20 25 30

Cys Ser Arg Cys Arg Ser Ser Phe Tyr Cys Cys Lys Glu His Gln Arg
 35 40 45

Gln Asp Trp Lys Lys His Lys Leu Val Cys Gln Gly Ser Glu Gly Ala
 50 55 60

Leu Gly His Gly Val Gly Pro His Gln His Ser Gly Pro Ala Pro Pro
 65 70 75 80

Ala Ala Val Pro Pro Arg Ala Gly Ala Arg Glu Pro Arg Lys Ala
 85 90 95

Ala Ala Arg Arg Asp Asn Ala Ser Gly Asp Ala Ala Lys Gly Lys Val
 100 105 110

Lys Ala Lys Pro Pro Ala Asp Pro Ala Ala Ala Ala Ser Pro Cys Arg
 115 120 125

Ala Ala Ala Gly Gly Gln Gly Ser Ala Val Ala Ala Glu Ala Glu Pro
 130 135 140

Gly Lys Glu Glu Pro Pro Ala Arg Ser Ser Leu Phe Gln Glu Lys Ala
 145 150 155 160

Asn Leu Tyr Pro Pro Ser Asn Thr Pro Gly Asp Ala Leu Ser Pro Gly
 165 170 175

Gly Gly Leu Arg Pro Asn Gly Gln Thr Lys Pro Leu Pro Ala Leu Lys
 180 185 190

Leu Ala Leu Glu Tyr Ile Val Pro Cys Met Asn Lys His Gly Ile Cys
 195 200 205

Val Val Asp Asp Phe Leu Gly Lys Glu Thr Gly Gln Gln Ile Gly Asp
 210 215 220

Glu Val Arg Ala Leu His Asp Thr Gly Lys Phe Thr Asp Gly Gln Leu
 225 230 235 240

Val Ser Gln Lys Ser Asp Ser Ser Lys Asp Ile Arg Gly Asp Lys Ile
 245 250 255

Thr Trp Ile Glu Gly Lys Glu Pro Gly Cys Glu Thr Ile Gly Leu Leu
 260 265 270

Met Ser Ser Met Asp Asp Leu Ile Arg His Cys Asn Gly Lys Leu Gly
 275 280 285

Ser Tyr Lys Ile Asn Gly Arg Thr Lys Ala Met Val Ala Cys Tyr Pro
 290 295 300

Gly Asn Gly Thr Gly Tyr Val Arg His Val Asp Asn Pro Asn Gly Asp
 305 310 315 320

Gly Arg Cys Val Thr Cys Ile Tyr Tyr Leu Asn Lys Asp Trp Asp Ala
 325 330 335

Lys Val Ser Gly Gly Ile Leu Arg Ile Phe Pro Glu Gly Lys Ala Gln
 340 345 350

Phe Ala Asp Ile Glu Pro Lys Phe Asp Arg Leu Leu Phe Phe Trp Ser
 355 360 365

Asp Arg Arg Asn Pro His Glu Val Gln Pro Ala Tyr Ala Thr Arg Tyr
 370 375 380

Ala Ile Thr Val Trp Tyr Phe Asp Ala Asp Glu Arg Ala Arg Ala Lys
 385 390 395 400

Val Lys Tyr Leu Thr Gly Glu Lys Gly Val Arg Val Glu Leu Asn Lys
 405 410 415

Pro Ser Asp Ser Val Gly Lys Asp Val Phe
 420 425

<210> 2577
 <211> 346
 <212> PRT
 <213> Homo sapiens

<400> 2577

Met Glu Ser Val Ser Cys Ser Ala Ala Ala Val Arg Thr Gly Asp Met
 1 5 10 15

Glu Ser Gln Arg Asp Leu Ser Leu Val Pro Glu Arg Leu Gln Arg Arg
 20 25 30

Glu Gln Glu Arg Gln Leu Glu Val Glu Arg Arg Lys Gln Lys Arg Gln
 35 40 45

Asn Gln Glu Val Glu Lys Glu Asn Ser His Phe Phe Val Ala Thr Phe
 50 55 60

Ala Arg Glu Arg Ala Ala Val Glu Glu Leu Leu Glu Arg Ala Glu Ser
 65 70 75 80

Val Glu Arg Leu Glu Glu Ala Ala Ser Arg Leu Gln Gly Leu Gln Lys
 85 90 95

Leu Ile Asn Asp Ser Val Phe Phe Leu Ala Ala Tyr Asp Leu Arg Gln
 100 105 110

Gly Gln Glu Ala Leu Ala Arg Leu Gln Ala Ala Leu Ala Glu Arg Arg
 115 120 125

Arg Gly Leu Gln Pro Lys Lys Arg Phe Ala Phe Lys Thr Arg Gly Lys
 130 135 140

Asp Ala Ala Ser Ser Thr Lys Val Asp Ala Ala Pro Gly Ile Pro Pro
 145 150 155 160

Ala Val Glu Ser Ile Gln Asp Ser Pro Leu Pro Lys Lys Ala Glu Gly
 165 170 175

Asp Leu Gly Pro Ser Trp Val Cys Gly Phe Ser Asn Leu Glu Ser Gln
 180 185 190

Val Leu Glu Lys Arg Ala Ser Glu Leu His Gln Arg Asp Val Leu Leu
 195 200 205

Thr Glu Leu Ser Asn Cys Thr Val Arg Leu Tyr Gly Asn Pro Asn Thr
 210 215 220

Leu Arg Leu Thr Lys Ala His Ser Cys Lys Leu Leu Cys Gly Pro Val
 225 230 235 240

Ser Thr Ser Val Phe Leu Glu Asp Cys Ser Asp Cys Val Leu Ala Val
 245 250 255

Ala Cys Gln Gln Leu Arg Ile His Ser Thr Lys Asp Thr Arg Ile Phe
 260 265 270

Leu Gln Val Thr Ser Arg Ala Ile Val Glu Asp Cys Ser Gly Ile Gln
 275 280 285

Phe Ala Pro Tyr Thr Trp Ser Tyr Pro Glu Ile Asp Lys Asp Phe Glu
 290 295 300

Ser Ser Gly Leu Asp Arg Ser Lys Asn Asn Trp Asn Asp Val Asp Asp
 305 310 315 320

Phe Asn Trp Leu Ala Arg Asp Met Ala Ser Pro Asn Trp Ser Ile Leu
 325 330 335

Pro Glu Glu Glu Arg Asn Ile Gln Trp Asp
 340 345

<210> 2578

<211> 247

<212> PRT

<213> Homo sapiens

<400> 2578

Met Glu Phe Pro Lys Met Leu Thr Arg Lys Ile Lys Leu Trp Asp Ile
 1 5 10 15

Asn Ala His Ile Thr Cys Arg Leu Cys Ser Gly Tyr Leu Ile Asp Ala
 20 25 30

Thr Thr Val Thr Glu Cys Leu His Thr Phe Cys Arg Ser Cys Leu Val
 35 40 45

Lys Tyr Leu Glu Glu Asn Asn Thr Cys Pro Thr Cys Arg Ile Val Ile
 50 55 60

His Gln Ser His Pro Leu Gln Tyr Ile Gly His Asp Arg Thr Met Gln
 65 70 75 80

Asp Ile Val Tyr Lys Leu Val Pro Gly Leu Gln Glu Ala Glu Met Arg
 85 90 95

Lys Gln Arg Glu Phe Tyr His Lys Leu Gly Met Glu Val Pro Gly Asp
100 105 110

Ile Lys Gly Glu Thr Cys Ser Ala Lys Gln His Leu Asp Ser His Arg
115 120 125

Asn Gly Glu Thr Lys Ala Asp Asp Ser Ser Asn Lys Glu Ala Ala Glu
130 135 140

Glu Lys Pro Glu Glu Asp Asn Asp Tyr His Arg Ser Asp Glu Gln Val
145 150 155 160

Ser Ile Cys Leu Glu Cys Asn Ser Ser Lys Leu Arg Gly Leu Lys Arg
165 170 175

Lys Trp Ile Arg Cys Ser Ala Gln Ala Thr Val Leu His Leu Lys Lys
180 185 190

Phe Ile Ala Lys Lys Leu Asn Leu Ser Ser Phe Asn Glu Leu Asp Ile
195 200 205

Leu Cys Asn Glu Glu Ile Leu Gly Lys Asp His Thr Leu Lys Phe Val
210 215 220

Val Val Thr Arg Trp Arg Phe Lys Lys Ala Pro Leu Leu Leu His Tyr
225 230 235 240

Arg Pro Lys Met Asp Leu Leu
245

<210> 2579

<211> 360

<212> PRT

<213> Homo sapiens

<400> 2579

Met Ala Ser Ala Thr Ala Pro Ala Ala Ala Val Pro Thr Leu Ala Ser
1 5 10 15

Pro Leu Glu Gln Leu Arg His Leu Ala Glu Glu Leu Arg Leu Leu Leu
20 25 30

Pro Arg Val Arg Val Gly Glu Ala Gln Glu Thr Thr Glu Glu Phe Asn
35 40 45

Arg Glu Met Phe Trp Arg Arg Leu Asn Glu Ala Ala Val Thr Val Ser
50 55 60

Arg Glu Ala Thr Thr Leu Thr Ile Val Phe Ser Gln Leu Pro Leu Pro
 65 70 75 80

Ser Pro Gln Glu Thr Gln Lys Phe Cys Glu Gln Val His Ala Ala Ile
 85 90 95

Lys Ala Phe Ile Ala Val Tyr Tyr Leu Leu Pro Lys Asp Gln Gly Ile
 100 105 110

Thr Leu Arg Lys Leu Val Arg Gly Ala Thr Leu Asp Ile Val Asp Gly
 115 120 125

Met Ala Gln Leu Met Glu Val Leu Ser Val Thr Pro Thr Gln Ser Pro
 130 135 140

Glu Asn Asn Asp Leu Ile Ser Tyr Asn Ser Val Trp Val Ala Cys Gln
 145 150 155 160

Gln Met Pro Gln Ile Pro Arg Asp Asn Lys Ala Ala Ala Leu Leu Met
 165 170 175

Leu Thr Lys Asn Val Asp Phe Val Lys Asp Ala His Glu Glu Met Glu
 180 185 190

Gln Ala Val Glu Glu Cys Asp Pro Tyr Ser Gly Leu Leu Asn Asp Thr
 195 200 205

Glu Glu Asn Asn Ser Asp Asn His Asn His Glu Asp Asp Val Leu Gly
 210 215 220

Phe Pro Ser Asn Gln Asp Leu Tyr Trp Ser Glu Asp Asp Gln Glu Leu
 225 230 235 240

Ile Ile Pro Cys Leu Ala Leu Val Arg Ala Ser Lys Ala Cys Leu Lys
 245 250 255

Lys Ile Arg Met Leu Val Ala Glu Asn Gly Lys Lys Asp Gln Val Ala
 260 265 270

Gln Met Ala Asp Ile Val Asp Ile Ser Asp Glu Ile Ser Pro Ser Val
 275 280 285

Asp Asp Leu Ala Leu Ser Ile Tyr Pro Pro Met Cys His Leu Thr Val
 290 295 300

Arg Ile Asn Ser Ala Lys Leu Val Ser Val Leu Lys Lys Ala Leu Glu
 305 310 315 320

Ile Thr Lys Ala Ser His Val Thr Pro Gln Pro Glu Asp Ser Trp Ile
 325 330 335

Pro Leu Leu Ile Asn Ala Ile Asp His Cys Met Asn Arg Ile Lys Glu
 340 345 350

Leu Thr Gln Ser Glu Leu Glu Leu
 355 360

<210> 2580
 <211> 412
 <212> PRT
 <213> Homo sapiens

<400> 2580

Met Ala Glu Asn Leu Lys Gly Cys Ser Val Cys Cys Lys Ser Ser Trp
 1 5 10 15

Asn Gln Leu Gln Asp Leu Cys Arg Leu Ala Lys Leu Ser Cys Pro Ala
 20 25 30

Leu Gly Ile Ser Lys Arg Asn Leu Tyr Asp Phe Glu Val Glu Tyr Leu
 35 40 45

Cys Asp Tyr Lys Lys Ile Arg Glu Gln Glu Tyr Tyr Leu Val Lys Trp
 50 55 60

Arg Gly Tyr Pro Asp Ser Glu Ser Thr Trp Glu Pro Arg Gln Asn Leu
 65 70 75 80

Lys Cys Val Arg Ile Leu Lys Gln Phe His Lys Asp Leu Glu Arg Glu
 85 90 95

Leu Leu Arg Arg His His Arg Ser Lys Thr Pro Arg His Leu Asp Pro
 100 105 110

Ser Leu Ala Asn Tyr Leu Val Gln Lys Ala Lys Gln Arg Arg Ala Leu
 115 120 125

Arg Arg Trp Glu Gln Glu Leu Asn Ala Lys Arg Ser His Leu Gly Arg
 130 135 140

Ile Thr Val Glu Asn Glu Val Asp Leu Asp Gly Pro Pro Arg Ala Phe

145		150		155		160
Val Tyr Ile Asn Glu Tyr Arg Val Gly Glu Gly Ile Thr Leu Asn Gln	165		170		175	
Val Ala Val Gly Cys Glu Cys Gln Asp Cys Leu Trp Ala Pro Thr Gly	180		185		190	
Gly Cys Cys Pro Gly Ala Ser Leu His Lys Phe Ala Tyr Asn Asp Gln	195		200		205	
Gly Gln Val Arg Leu Arg Ala Gly Leu Pro Ile Tyr Glu Cys Asn Ser	210		215		220	
Arg Cys Arg Cys Gly Tyr Asp Cys Pro Asn Arg Val Val Gln Lys Gly	225		230		235	240
Ile Arg Tyr Asp Leu Cys Ile Phe Arg Thr Asp Asp Gly Arg Gly Trp	245		250		255	
Gly Val Arg Thr Leu Glu Lys Ile Arg Lys Asn Ser Phe Val Met Glu	260		265		270	
Tyr Val Gly Glu Ile Ile Thr Ser Glu Glu Ala Glu Arg Arg Gly Gln	275		280		285	
Ile Tyr Asp Arg Gln Gly Ala Thr Tyr Leu Phe Asp Leu Asp Tyr Val	290		295		300	
Glu Asp Val Tyr Thr Val Asp Ala Ala Tyr Tyr Gly Asn Ile Ser His	305		310		315	320
Phe Val Asn His Ser Cys Asp Pro Asn Leu Gln Val Tyr Asn Val Phe	325		330		335	
Ile Asp Asn Leu Asp Glu Arg Leu Pro Arg Ile Ala Phe Phe Ala Thr	340		345		350	
Arg Thr Ile Arg Ala Gly Glu Glu Leu Thr Phe Asp Tyr Asn Met Gln	355		360		365	
Val Asp Pro Val Asp Met Glu Ser Thr Arg Met Asp Ser Asn Phe Gly	370		375		380	
Leu Ala Gly Leu Pro Gly Ser Pro Lys Lys Arg Val Arg Ile Glu Cys	385		390		395	400

Lys Cys Gly Thr Glu Ser Cys Arg Lys Tyr Leu Phe
 405 410

<210> 2581
 <211> 110
 <212> PRT
 <213> Homo sapiens
 <400> 2581

Met Val Tyr Glu Arg Ala Gly Glu Ala Val Pro Pro Arg Gly Leu Arg
 1 5 10 15

Glu Lys Phe Pro Arg Ala Leu Phe Gly Trp Ala Gly Glu Arg Pro Ser
 20 25 30

Ala Leu Cys Ala Ser Asn Pro Pro Gln Leu Ser Cys Ser Gly Arg Gly
 35 40 45

Ala Arg Tyr Phe Arg Leu Gly Glu Val Leu Gly Thr Asp Val Gly Ser
 50 55 60

Ser Val Gly Asp Phe Ser Gly Phe Trp Pro Phe Gln Thr Leu Val Ile
 65 70 75 80

Val Phe Ser Val Gln Ser Ser Phe Gly Val Trp Gly Phe Pro Ser Ser
 85 90 95

Cys Ala Arg His Arg Glu Ala Trp Pro Glu Gly Pro Val Ser
 100 105 110

<210> 2582
 <211> 471
 <212> PRT
 <213> Homo sapiens
 <400> 2582

Met Pro Asn Ser Glu Pro Ala Ser Leu Leu Glu Leu Phe Asn Ser Ile
 1 5 10 15

Ala Thr Gln Gly Glu Leu Val Arg Ser Leu Lys Ala Gly Asn Ala Ser
 20 25 30

Lys Asp Glu Ile Asp Ser Ala Val Lys Met Leu Val Ser Leu Lys Met
 35 40 45

Ser Tyr Lys Ala Ala Ala Gly Glu Asp Tyr Lys Ala Asp Cys Pro Pro

50		55		60
Gly Asn Pro Ala Pro Thr Ser Asn His Gly Pro Asp Ala Thr Glu Ala				
65		70		75 80
Glu Glu Asp Phe Val Asp Pro Trp Thr Val Gln Thr Ser Ser Ala Lys				
	85		90	95
Gly Ile Asp Tyr Asp Lys Leu Ile Val Arg Phe Gly Ser Ser Lys Ile				
	100		105	110
Asp Lys Glu Leu Ile Asn Arg Ile Glu Arg Ala Thr Gly Gln Arg Pro				
	115		120	125
His His Phe Leu Arg Arg Gly Ile Phe Phe Ser His Arg Asp Met Asn				
	130		135	140
Gln Val Leu Asp Ala Tyr Glu Asn Lys Lys Pro Phe Tyr Leu Tyr Thr				
145		150		155 160
Gly Arg Gly Pro Ser Ser Glu Ala Met His Val Gly His Leu Ile Pro				
	165		170	175
Phe Ile Phe Thr Lys Trp Leu Gln Asp Val Phe Asn Val Pro Leu Val				
	180		185	190
Ile Gln Met Thr Asp Asp Glu Lys Tyr Leu Trp Lys Asp Leu Thr Leu				
	195		200	205
Asp Gln Ala Tyr Gly Asp Ala Val Glu Asn Ala Lys Asp Ile Ile Ala				
	210		215	220
Cys Gly Phe Asp Ile Asn Lys Thr Phe Ile Phe Ser Asp Leu Asp Tyr				
225		230		235 240
Met Gly Met Ser Ser Gly Phe Tyr Lys Asn Val Val Lys Ile Gln Lys				
	245		250	255
His Val Thr Phe Asn Gln Val Lys Gly Ile Phe Gly Phe Thr Asp Ser				
	260		265	270
Asp Cys Ile Gly Lys Ile Ser Phe Pro Ala Ile Gln Ala Ala Pro Ser				
	275		280	285
Phe Ser Asn Ser Phe Pro Gln Ile Phe Arg Asp Arg Thr Asp Ile Gln				
	290		295	300

Cys Leu Ile Pro Cys Ala Ile Asp Gln Asp Pro Tyr Phe Arg Met Thr
305 310 315 320

Arg Asp Val Ala Pro Arg Ile Gly Tyr Pro Lys Pro Ala Leu Leu His
325 330 335

Ser Thr Phe Phe Pro Ala Leu Gln Gly Ala Gln Thr Lys Met Ser Ala
340 345 350

Ser Asp Pro Asn Ser Ser Ile Phe Leu Thr Asp Thr Ala Lys Gln Ile
355 360 365

Lys Thr Lys Val Asn Lys His Ala Phe Ser Gly Gly Arg Asp Thr Ile
370 375 380

Glu Glu His Arg Gln Phe Gly Gly Asn Cys Asp Val Asp Val Ser Phe
385 390 395 400

Met Tyr Leu Thr Phe Phe Leu Glu Asp Asp Asp Lys Leu Glu Gln Ile
405 410 415

Arg Lys Asp Tyr Thr Ser Gly Ala Met Leu Thr Gly Glu Leu Lys Lys
420 425 430

Ala Leu Ile Glu Val Leu Gln Pro Leu Ile Ala Glu His Gln Ala Arg
435 440 445

Arg Lys Glu Val Thr Asp Glu Ile Val Lys Glu Phe Met Thr Pro Arg
450 455 460

Lys Leu Ser Phe Asp Phe Gln
465 470

<210> 2583

<211> 392

<212> PRT

<213> Homo sapiens

<400> 2583

Met Gly Ser Leu Ser Thr Ala Asn Val Glu Phe Cys Leu Asp Val Phe
1 5 10 15

Lys Glu Leu Asn Ser Asn Asn Ile Gly Asp Asn Ile Phe Phe Ser Ser
20 25 30

Leu Ser Leu Leu Tyr Ala Leu Ser Met Val Leu Leu Gly Ala Arg Gly
 35 40 45

Glu Thr Ala Glu Gln Leu Glu Lys Val Leu His Phe Ser His Thr Val
 50 55 60

Asp Ser Leu Lys Pro Gly Phe Lys Asp Ser Pro Lys Cys Ser Gln Ala
 65 70 75 80

Gly Arg Ile His Ser Glu Phe Gly Val Glu Phe Ser Gln Ile Asn Gln
 85 90 95

Pro Asp Ser Asn Cys Thr Leu Ser Ile Ala Asn Arg Leu Tyr Gly Thr
 100 105 110

Lys Thr Met Ala Phe His Gln Gln Tyr Leu Ser Cys Ser Glu Lys Trp
 115 120 125

Tyr Gln Ala Arg Leu Gln Thr Val Asp Phe Glu Gln Ser Thr Glu Glu
 130 135 140

Thr Arg Lys Met Ile Asn Ala Trp Val Glu Asn Lys Thr Asn Gly Lys
 145 150 155 160

Val Ala Asn Leu Phe Gly Lys Ser Thr Ile Asp Pro Ser Ser Val Met
 165 170 175

Val Leu Val Asn Thr Ile Tyr Phe Lys Gly Gln Arg Gln Asn Lys Phe
 180 185 190

Gln Val Arg Glu Thr Val Lys Ser Pro Phe Gln Leu Ser Glu Gly Lys
 195 200 205

Asn Val Thr Val Glu Met Met Tyr Gln Ile Gly Thr Phe Lys Leu Ala
 210 215 220

Phe Val Lys Glu Pro Gln Met Gln Val Leu Glu Leu Pro Tyr Val Asn
 225 230 235 240

Asn Lys Leu Ser Met Ile Ile Leu Leu Pro Val Gly Ile Ala Asn Leu
 245 250 255

Lys Gln Ile Glu Lys Gln Leu Asn Ser Gly Thr Phe His Glu Trp Thr
 260 265 270

Ser Ser Ser Asn Met Met Glu Arg Glu Val Glu Val His Leu Pro Arg

275 280 285

Phe Lys Leu Glu Ile Lys Tyr Glu Leu Asn Ser Leu Leu Lys Pro Leu
290 295 300

Gly Val Thr Asp Leu Phe Asn Gln Val Lys Ala Asp Leu Ser Gly Met
305 310 315 320

Ser Pro Thr Lys Gly Leu Tyr Leu Ser Lys Ala Ile His Lys Ser Tyr
325 330 335

Leu Asp Val Ser Glu Glu Gly Thr Glu Ala Ala Ala Thr Gly Asp
340 345 350

Ser Ile Ala Val Lys Ser Leu Pro Met Arg Ala Gln Phe Lys Ala Asn
355 360 365

His Pro Phe Leu Phe Phe Ile Arg His Thr His Thr Asn Thr Ile Leu
370 375 380

Phe Cys Gly Lys Leu Ala Ser Pro
385 390

<210> 2584
<211> 811
<212> PRT
<213> Homo sapiens

<400> 2584

Met Pro Leu Ser Ser Pro Asn Ala Ala Ala Thr Ala Ser Asp Met Asp
1 5 10 15

Lys Asn Ser Gly Ser Asn Ser Ser Ser Ala Ser Ser Gly Ser Ser Lys
20 25 30

Gly Gln Gln Pro Pro Arg Ser Ala Ser Ala Gly Pro Ala Gly Glu Ser
35 40 45

Lys Pro Lys Ser Asp Gly Lys Asn Ser Ser Gly Ser Lys Arg Tyr Asn
50 55 60

Arg Lys Arg Glu Leu Ser Tyr Pro Lys Asn Glu Ser Phe Asn Asn Gln
65 70 75 80

Ser Arg Arg Ser Ser Ser Gln Lys Ser Lys Thr Phe Asn Lys Met Pro
85 90 95

Pro Gln Arg Gly Gly Gly Ser Ser Lys Leu Phe Ser Ser Ser Phe Asn
 100 105 110

Gly Gly Arg Arg Asp Glu Val Ala Glu Ala Gln Arg Ala Glu Phe Ser
 115 120 125

Pro Ala Gln Phe Ser Gly Pro Lys Lys Ile Asn Leu Asn His Leu Leu
 130 135 140

Asn Phe Thr Phe Glu Pro Arg Gly Gln Thr Gly His Phe Glu Gly Ser
 145 150 155 160

Gly His Gly Ser Trp Gly Lys Arg Asn Lys Trp Gly His Lys Pro Phe
 165 170 175

Asn Lys Glu Leu Phe Leu Gln Ala Asn Cys Gln Phe Val Val Ser Glu
 180 185 190

Asp Gln Asp Tyr Thr Ala His Phe Ala Asp Pro Asp Thr Leu Val Asn
 195 200 205

Trp Asp Phe Val Glu Gln Val Arg Ile Cys Ser His Glu Val Pro Ser
 210 215 220

Cys Pro Ile Cys Leu Tyr Pro Pro Thr Ala Ala Lys Ile Thr Arg Cys
 225 230 235 240

Gly His Ile Phe Cys Trp Ala Cys Ile Leu His Tyr Leu Ser Leu Ser
 245 250 255

Glu Lys Thr Trp Ser Lys Cys Pro Ile Cys Tyr Ser Ser Val His Lys
 260 265 270

Lys Asp Leu Lys Ser Val Val Ala Thr Glu Ser His Gln Tyr Val Val
 275 280 285

Gly Asp Thr Ile Thr Met Gln Leu Met Lys Arg Glu Lys Gly Val Leu
 290 295 300

Val Ala Leu Pro Lys Ser Lys Trp Met Asn Val Asp His Pro Ile His
 305 310 315 320

Leu Gly Asp Glu Gln His Ser Gln Tyr Ser Lys Phe Leu Leu Ala Ser
 325 330 335

Lys Glu Gln Val Leu His Arg Val Val Leu Glu Glu Lys Val Ala Leu
 340 345 350

Glu Gln Gln Leu Ala Glu Glu Lys His Thr Pro Glu Ser Cys Phe Ile
 355 360 365

Glu Ala Ala Ile Gln Glu Leu Lys Thr Arg Glu Glu Ala Leu Ser Gly
 370 375 380

Leu Ala Gly Ser Arg Arg Glu Val Thr Gly Val Val Ala Ala Leu Glu
 385 390 395 400

Gln Leu Val Leu Met Ala Pro Leu Ala Lys Glu Ser Val Phe Gln Pro
 405 410 415

Arg Lys Gly Val Leu Glu Tyr Leu Ser Ala Phe Asp Glu Glu Thr Thr
 420 425 430

Glu Val Cys Ser Leu Asp Thr Pro Ser Arg Pro Leu Ala Leu Pro Leu
 435 440 445

Val Glu Glu Glu Glu Ala Val Ser Glu Pro Glu Pro Glu Gly Leu Pro
 450 455 460

Glu Ala Cys Asp Asp Leu Glu Leu Ala Asp Asp Asn Leu Lys Glu Gly
 465 470 475 480

Thr Ile Cys Thr Glu Ser Ser Gln Gln Glu Pro Ile Thr Lys Ser Gly
 485 490 495

Phe Thr Arg Leu Ser Ser Ser Pro Cys Tyr Tyr Phe Tyr Gln Ala Glu
 500 505 510

Asp Gly Gln His Met Phe Leu His Pro Val Asn Val Arg Cys Leu Val
 515 520 525

Arg Glu Tyr Gly Ser Leu Glu Arg Ser Pro Glu Lys Ile Ser Ala Thr
 530 535 540

Val Val Glu Ile Ala Gly Tyr Ser Met Ser Glu Asp Val Arg Gln Arg
 545 550 555 560

His Arg Tyr Leu Ser His Leu Pro Leu Thr Cys Glu Phe Ser Ile Cys
 565 570 575

Glu Leu Ala Leu Gln Pro Pro Val Val Ser Lys Glu Thr Leu Glu Met

580

585

590

Phe Ser Asp Asp Ile Glu Lys Arg Lys Arg Gln Arg Gln Lys Lys Ala
 595 600 605

Arg Glu Glu Arg Arg Arg Glu Arg Arg Ile Glu Ile Glu Glu Asn Lys
 610 615 620

Lys Gln Gly Lys Tyr Pro Glu Val His Ile Pro Leu Glu Asn Leu Gln
 625 630 635 640

Gln Phe Pro Ala Phe Asn Ser Tyr Thr Cys Ser Ser Asp Ser Ala Leu
 645 650 655

Gly Pro Thr Ser Thr Glu Gly His Gly Ala Leu Ser Ile Ser Pro Leu
 660 665 670

Ser Arg Ser Pro Gly Ser His Ala Asp Phe Leu Leu Thr Pro Leu Ser
 675 680 685

Pro Thr Ala Ser Gln Gly Ser Pro Ser Phe Cys Val Gly Ser Leu Glu
 690 695 700

Glu Asp Ser Pro Phe Pro Ser Phe Ala Gln Met Leu Arg Val Gly Lys
 705 710 715 720

Ala Lys Ala Asp Val Trp Pro Lys Thr Ala Pro Lys Lys Asp Glu Asn
 725 730 735

Ser Leu Val Pro Pro Ala Pro Val Asp Ser Asp Gly Glu Ser Asp Asn
 740 745 750

Ser Asp Arg Val Pro Val Pro Ser Phe Gln Asn Ser Phe Ser Gln Ala
 755 760 765

Ile Glu Ala Ala Phe Met Lys Leu Asp Thr Pro Ala Thr Ser Asp Pro
 770 775 780

Leu Ser Glu Glu Lys Gly Gly Lys Lys Arg Lys Lys Gln Lys Gln Lys
 785 790 795 800

Leu Leu Phe Ser Thr Ser Val Val His Thr Lys
 805 810

<210> 2585

<211> 482

<212> PRT
 <213> Homo sapiens

<400> 2585

Met Ala Glu Ala Ala Thr Pro Gly Thr Thr Ala Thr Thr Ser Gly Ala
 1 5 10 15

Gly Ala Ala Ala Ala Thr Ala Ala Ala Ala Ser Pro Thr Pro Ile Pro
 20 25 30

Thr Val Thr Ala Pro Ser Leu Gly Ala Gly Gly Gly Gly Gly Ser
 35 40 45

Asp Gly Ser Gly Gly Gly Trp Thr Lys Gln Val Thr Cys Arg Tyr Phe
 50 55 60

Met His Gly Val Cys Lys Glu Gly Asp Asn Cys Arg Tyr Ser His Asp
 65 70 75 80

Leu Ser Asp Ser Pro Tyr Ser Val Val Cys Lys Tyr Phe Gln Arg Gly
 85 90 95

Tyr Cys Ile Tyr Gly Asp Arg Cys Arg Tyr Glu His Ser Lys Pro Leu
 100 105 110

Lys Gln Glu Glu Ala Thr Ala Thr Glu Leu Thr Thr Lys Ser Ser Leu
 115 120 125

Ala Ala Ser Ser Ser Leu Ser Ser Ile Val Gly Pro Leu Val Glu Met
 130 135 140

Asn Thr Gly Glu Ala Glu Ser Arg Asn Ser Asn Phe Ala Thr Val Gly
 145 150 155 160

Ala Gly Ser Glu Asp Trp Val Asn Ala Ile Glu Phe Val Pro Gly Gln
 165 170 175

Pro Tyr Cys Gly Arg Thr Ala Pro Ser Cys Thr Glu Ala Pro Leu Gln
 180 185 190

Gly Ser Val Thr Lys Glu Glu Ser Glu Lys Glu Gln Thr Ala Val Glu
 195 200 205

Thr Lys Lys Gln Leu Cys Pro Tyr Ala Ala Val Gly Glu Cys Arg Tyr
 210 215 220

Gly Glu Asn Cys Val Tyr Leu His Gly Asp Ser Cys Asp Met Cys Gly
 225 230 235 240

Leu Gln Leu Leu His Pro Met Asp Ala Ala Gln Arg Ser Gln His Ile
 245 250 255

Lys Ser Cys Ile Glu Ala His Glu Lys Asp Met Glu Leu Ser Phe Ala
 260 265 270

Val Gln Arg Ser Lys Asp Met Val Cys Gly Ile Cys Met Glu Val Val
 275 280 285

Tyr Glu Lys Ala Asn Pro Ser Glu Arg Arg Phe Gly Ile Leu Ser Asn
 290 295 300

Cys Asn His Thr Tyr Cys Leu Lys Cys Ile Arg Lys Trp Arg Ser Ala
 305 310 315 320

Lys Gln Phe Glu Ser Lys Ile Ile Lys Ser Cys Pro Glu Cys Arg Ile
 325 330 335

Thr Ser Asn Phe Val Ile Pro Ser Glu Tyr Trp Val Glu Glu Lys Glu
 340 345 350

Glu Lys Gln Lys Leu Ile Leu Lys Tyr Lys Glu Ala Met Ser Asn Lys
 355 360 365

Ala Cys Arg Tyr Phe Asp Glu Gly Arg Gly Ser Cys Pro Phe Gly Gly
 370 375 380

Asn Cys Phe Tyr Lys His Ala Tyr Pro Asp Gly Arg Arg Glu Glu Pro
 385 390 395 400

Gln Arg Gln Lys Val Gly Thr Ser Ser Arg Tyr Arg Ala Gln Arg Arg
 405 410 415

Asn His Phe Trp Glu Leu Ile Glu Glu Arg Glu Asn Ser Asn Pro Phe
 420 425 430

Asp Asn Asp Glu Glu Glu Val Val Thr Phe Glu Leu Gly Glu Met Leu
 435 440 445

Leu Met Leu Leu Ala Ala Gly Gly Asp Asp Glu Leu Thr Asp Ser Glu
 450 455 460

Asp Glu Trp Asp Leu Phe His Asp Glu Leu Glu Asp Phe Tyr Asp Leu

465

470

475

480

Asp Leu

<210> 2586

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2586

Met Pro Ser Lys Gly Pro Leu Gln Ser Val Gln Val Phe Gly Arg Lys
 1 5 10 15

Lys Thr Ala Thr Ala Val Ala His Cys Lys Arg Gly Asn Gly Leu Ile
 20 25 30

Lys Val Asn Gly Arg Pro Leu Glu Met Ile Glu Pro Arg Thr Leu Gln
 35 40 45

Tyr Lys Leu Leu Glu Pro Val Leu Leu Leu Gly Lys Glu Arg Phe Ala
 50 55 60

Gly Val Asp Ile Arg Val Arg Val Lys Gly Gly Gly His Val Ala Gln
 65 70 75 80

Ile Tyr Ala Ile Arg Gln Ser Ile Ser Lys Ala Leu Val Ala Tyr Tyr
 85 90 95

Gln Lys Tyr Val Asp Glu Ala Ser Lys Lys Glu Ile Lys Asp Ile Leu
 100 105 110

Ile Gln Tyr Asp Arg Thr Leu Leu Val Ala Asp Pro Arg Arg Cys Glu
 115 120 125

Ser Lys Lys Phe Gly Gly Pro Gly Ala Arg Ala Arg Tyr Gln Lys Ser
 130 135 140

Tyr Arg
 145

<210> 2587

<211> 1674

<212> PRT

<213> Homo sapiens

<400> 2587

Met Glu Asp Ala Ser Glu Ser Ser Arg Gly Val Ala Pro Leu Ile Asn
 1 5 10 15

Asn Val Val Leu Pro Gly Ser Pro Leu Ser Leu Pro Val Ser Val Thr
 20 25 30

Gly Cys Lys Ser His Arg Val Ala Asn Lys Lys Val Glu Ala Arg Ser
 35 40 45

Glu Lys Leu Leu Pro Thr Ala Leu Pro Pro Ser Glu Pro Lys Val Asp
 50 55 60

Gln Lys Leu Pro Arg Ser Ser Glu Arg Arg Gly Ser Gly Gly Gly Thr
 65 70 75 80

Gln Phe Pro Ala Arg Ser Arg Ala Val Ala Ala Gly Glu Ala Ala Ala
 85 90 95

Arg Gly Ala Ala Gly Pro Glu Arg Gly Ser Pro Leu Gly Arg Arg Val
 100 105 110

Ser Pro Arg Cys Leu Cys Ser Gly Glu Gly Gly Gln Val Ala Val Gly
 115 120 125

Val Ile Ala Gly Lys Arg Gly Arg Arg Gly Arg Asp Gly Ser Arg Arg
 130 135 140

Ala Pro Gly Gly Arg Glu Met Pro Leu Leu His Arg Lys Pro Phe Val
 145 150 155 160

Arg Gln Lys Pro Pro Ala Asp Leu Arg Pro Asp Glu Glu Val Phe Tyr
 165 170 175

Cys Lys Val Thr Asn Glu Ile Phe Arg His Tyr Asp Asp Phe Phe Glu
 180 185 190

Arg Thr Ile Leu Cys Asn Ser Leu Val Trp Ser Cys Ala Val Thr Gly
 195 200 205

Arg Pro Gly Leu Thr Tyr Gln Glu Ala Leu Glu Ser Glu Lys Lys Ala
 210 215 220

Arg Gln Asn Leu Gln Ser Phe Pro Glu Pro Leu Ile Ile Pro Val Leu
 225 230 235 240

Tyr Leu Thr Ser Leu Thr His Arg Ser Arg Leu His Glu Ile Cys Asp

	245		250		255
Asp Ile Phe Ala Tyr Val Lys Asp Arg Tyr Phe Val Glu Glu Thr Val	260		265		270
Glu Val Ile Arg Asn Asn Gly Ala Arg Leu Gln Cys Thr Ile Leu Glu	275		280		285
Val Leu Pro Pro Ser His Gln Asn Gly Phe Ala Asn Gly His Val Asn	290		295		300
Ser Val Asp Gly Glu Thr Ile Ile Ile Ser Asp Ser Asp Asp Ser Glu	305		310		315
Thr Gln Ser Cys Ser Phe Gln Asn Gly Lys Lys Lys Asp Ala Ile Asp	325		330		335
Pro Leu Leu Phe Lys Tyr Lys Val Gln Pro Thr Lys Lys Glu Leu His	340		345		350
Glu Ser Ala Ile Val Lys Ala Thr Gln Ile Ser Arg Arg Lys His Leu	355		360		365
Phe Ser Arg Asp Lys Leu Lys Leu Phe Leu Lys Gln His Cys Glu Pro	370		375		380
Gln Glu Gly Val Ile Lys Ile Lys Ala Ser Ser Leu Ser Thr Tyr Lys	385		390		395
Ile Ala Glu Gln Asp Phe Ser Tyr Phe Phe Pro Asp Asp Pro Pro Thr	405		410		415
Phe Ile Phe Ser Pro Ala Asn Arg Arg Arg Gly Arg Pro Pro Lys Arg	420		425		430
Ile His Ile Ser Gln Glu Asp Asn Val Ala Asn Lys Gln Thr Leu Ala	435		440		445
Ser Tyr Arg Ser Lys Ala Thr Lys Glu Arg Asp Lys Leu Leu Lys Gln	450		455		460
Glu Glu Met Lys Ser Leu Ala Phe Glu Lys Ala Lys Leu Lys Arg Glu	465		470		475
Lys Ala Asp Ala Leu Glu Ala Lys Lys Lys Glu Lys Glu Asp Lys Glu	485		490		495

Lys Lys Arg Glu Glu Leu Lys Lys Ile Val Glu Glu Glu Arg Leu Lys
 500 505 510

Lys Lys Glu Glu Lys Glu Arg Leu Lys Val Glu Arg Glu Lys Glu Arg
 515 520 525

Glu Lys Leu Arg Glu Glu Lys Arg Lys Tyr Val Glu Tyr Leu Lys Gln
 530 535 540

Trp Ser Lys Pro Arg Glu Asp Met Glu Cys Asp Asp Leu Lys Glu Leu
 545 550 555 560

Pro Glu Pro Thr Pro Val Lys Thr Arg Leu Pro Pro Glu Ile Phe Gly
 565 570 575

Asp Ala Leu Met Val Leu Glu Phe Leu Asn Ala Phe Gly Glu Leu Phe
 580 585 590

Asp Leu Gln Asp Glu Phe Pro Asp Gly Val Thr Leu Glu Val Leu Glu
 595 600 605

Glu Ala Leu Val Gly Asn Asp Ser Glu Gly Pro Leu Cys Glu Leu Leu
 610 615 620

Phe Phe Phe Leu Thr Ala Ile Phe Gln Ala Ile Ala Glu Glu Glu Glu
 625 630 635 640

Glu Val Ala Lys Glu Gln Leu Thr Asp Ala Asp Thr Lys Gly Cys Ser
 645 650 655

Leu Lys Ser Leu Asp Leu Asp Ser Cys Thr Leu Ser Glu Ile Leu Arg
 660 665 670

Leu His Ile Leu Ala Ser Gly Ala Asp Val Thr Ser Ala Asn Ala Lys
 675 680 685

Tyr Arg Tyr Gln Lys Arg Gly Gly Phe Asp Ala Thr Asp Asp Ala Cys
 690 695 700

Met Glu Leu Arg Leu Ser Asn Pro Ser Leu Val Lys Lys Leu Ser Ser
 705 710 715 720

Thr Ser Val Tyr Asp Leu Thr Pro Gly Glu Lys Met Lys Ile Leu His
 725 730 735

Ala Leu Cys Gly Lys Leu Leu Thr Leu Val Ser Thr Arg Asp Phe Ile
 740 745 750

Glu Asp Tyr Val Asp Ile Leu Arg Gln Ala Lys Gln Glu Phe Arg Glu
 755 760 765

Leu Lys Ala Glu Gln His Arg Lys Glu Arg Glu Glu Ala Ala Ala Arg
 770 775 780

Ile Arg Lys Arg Lys Glu Glu Lys Leu Lys Glu Gln Glu Gln Lys Met
 785 790 795 800

Lys Glu Lys Gln Glu Lys Leu Lys Glu Asp Glu Gln Arg Asn Ser Thr
 805 810 815

Ala Asp Ile Ser Ile Gly Glu Glu Glu Arg Glu Asp Phe Asp Thr Ser
 820 825 830

Ile Glu Ser Lys Asp Thr Glu Gln Lys Glu Leu Asp Gln Asp Met Phe
 835 840 845

Thr Glu Asp Glu Asp Asp Pro Gly Ser His Lys Arg Gly Arg Arg Gly
 850 855 860

Lys Arg Gly Gln Asn Gly Phe Lys Glu Phe Thr Arg Gln Glu Gln Ile
 865 870 875 880

Asn Cys Val Thr Arg Glu Leu Leu Thr Ala Asp Glu Glu Glu Ala Leu
 885 890 895

Lys Gln Glu His Gln Arg Lys Glu Lys Glu Leu Leu Glu Lys Ile Gln
 900 905 910

Ser Ala Ile Ala Cys Thr Asn Ile Phe Pro Leu Gly Arg Asp Arg Met
 915 920 925

Tyr Arg Arg Tyr Trp Ile Phe Pro Ser Ile Pro Gly Leu Phe Ile Glu
 930 935 940

Glu Asp Tyr Ser Gly Leu Thr Glu Asp Met Leu Leu Pro Arg Pro Ser
 945 950 955 960

Ser Phe Gln Asn Asn Val Gln Ser Gln Asp Pro Gln Val Ser Thr Lys
 965 970 975

Thr Gly Glu Pro Leu Met Ser Glu Ser Thr Ser Asn Ile Asp Gln Gly
 980 985 990

Pro Arg Asp His Ser Val Gln Leu Pro Lys Pro Val His Lys Pro Asn
 995 1000 1005

Arg Trp Cys Phe Tyr Ser Ser Cys Glu Gln Leu Asp Gln Leu Ile
 1010 1015 1020

Glu Ala Leu Asn Ser Arg Gly His Arg Glu Ser Ala Leu Lys Glu
 1025 1030 1035

Thr Leu Leu Gln Glu Lys Ser Arg Ile Cys Ala Gln Leu Ala Arg
 1040 1045 1050

Phe Ser Glu Glu Lys Phe His Phe Ser Asp Lys Pro Gln Pro Asp
 1055 1060 1065

Ser Lys Pro Thr Tyr Ser Arg Gly Arg Ser Ser Asn Ala Tyr Asp
 1070 1075 1080

Pro Ser Gln Met Cys Ala Glu Lys Gln Leu Glu Leu Arg Leu Arg
 1085 1090 1095

Asp Phe Leu Leu Asp Ile Glu Asp Arg Ile Tyr Gln Gly Thr Leu
 1100 1105 1110

Gly Ala Ile Lys Val Thr Asp Arg His Ile Trp Arg Ser Ala Leu
 1115 1120 1125

Glu Ser Gly Arg Tyr Glu Leu Leu Ser Glu Glu Asn Lys Glu Asn
 1130 1135 1140

Gly Ile Ile Lys Thr Val Asn Glu Asp Val Glu Glu Met Glu Ile
 1145 1150 1155

Asp Glu Gln Thr Lys Val Ile Val Lys Asp Arg Leu Leu Gly Ile
 1160 1165 1170

Lys Thr Glu Thr Pro Ser Thr Val Ser Thr Asn Ala Ser Thr Pro
 1175 1180 1185

Gln Ser Val Ser Ser Val Val His Tyr Leu Ala Met Ala Leu Phe
 1190 1195 1200

Gln Ile Glu Gln Gly Ile Glu Arg Arg Phe Leu Lys Ala Pro Leu

1205		1210		1215	
Asp Ala 1220	Ser Asp Ser Gly Arg 1225	Ser Tyr Lys Thr 1230	Val Leu Asp Arg 1235		
Trp Arg 1235	Glu Ser Leu Leu Ser 1240	Ser Ala Ser Leu Ser 1245	Gln Val Phe 1250		
Leu His 1250	Leu Ser Thr Leu Asp 1255	Arg Ser Val Ile 1260	Trp Ser Lys Ser 1265		
Ile Leu 1265	Asn Ala Arg Cys Lys 1270	Ile Cys Arg Lys 1275	Lys Gly Asp Ala 1280		
Glu Asn 1280	Met Val Leu Cys Asp 1285	Gly Cys Asp Arg 1290	Gly His His Thr 1295		
Tyr Cys 1295	Val Arg Pro Lys Leu 1300	Lys Thr Val Pro 1305	Glu Gly Asp Trp 1310		
Phe Cys 1310	Pro Glu Cys Arg Pro 1315	Lys Gln Arg Cys 1320	Arg Arg Leu Ser 1325		
Phe Arg 1325	Gln Arg Pro Ser Leu 1330	Glu Ser Asp Glu 1335	Asp Val Glu Asp 1340		
Ser Met 1340	Gly Gly Glu Asp 1345	Glu Val Asp Gly 1350	Asp Glu Glu Glu 1355		
Gly Gln 1355	Ser Glu Glu Glu Glu 1360	Tyr Glu Val Glu 1365	Gln Asp Glu Asp 1370		
Asp Ser 1370	Gln Glu Glu Glu Glu 1375	Val Ser Leu Pro 1380	Lys Arg Gly Arg 1385		
Pro Gln 1385	Val Arg Leu Pro Val 1390	Lys Thr Arg Gly 1395	Lys Leu Ser Ser 1400		
Ser Phe 1400	Ser Ser Arg Gly Gln 1405	Gln Gln Glu Pro 1410	Gly Arg Tyr Pro 1415		
Ser Arg 1415	Ser Gln Gln Ser Thr 1420	Pro Lys Thr Thr 1425	Val Ser Ser Lys 1430		
Thr Gly 1430	Arg Ser Leu Arg Lys 1435	Ile Asn Ser Ala 1440	Pro Pro Thr Glu 1445		

Thr Lys Ser Leu Arg Ile Ala Ser Arg Ser Thr Arg His Ser His
 1445 1450 1455
 Gly Pro Leu Gln Ala Asp Val Phe Val Glu Leu Leu Ser Pro Arg
 1460 1465 1470
 Arg Lys Arg Arg Gly Arg Lys Ser Ala Asn Asn Thr Pro Glu Asn
 1475 1480 1485
 Ser Pro Asn Phe Pro Asn Phe Arg Val Ile Ala Thr Lys Ser Ser
 1490 1495 1500
 Glu Gln Ser Arg Ser Val Asn Ile Ala Ser Lys Leu Ser Leu Gln
 1505 1510 1515
 Glu Ser Glu Ser Lys Arg Arg Cys Arg Lys Arg Gln Ser Pro Glu
 1520 1525 1530
 Pro Ser Pro Val Thr Leu Gly Arg Arg Ser Ser Gly Arg Gln Gly
 1535 1540 1545
 Gly Val His Glu Leu Ser Ala Phe Glu Gln Leu Val Val Glu Leu
 1550 1555 1560
 Val Arg His Asp Asp Ser Trp Pro Phe Leu Lys Leu Val Ser Lys
 1565 1570 1575
 Ile Gln Val Pro Asp Tyr Tyr Asp Ile Ile Lys Lys Pro Ile Ala
 1580 1585 1590
 Leu Asn Ile Ile Arg Glu Lys Val Asn Lys Cys Glu Tyr Lys Leu
 1595 1600 1605
 Ala Ser Glu Phe Ile Asp Asp Ile Glu Leu Met Phe Ser Asn Cys
 1610 1615 1620
 Phe Glu Tyr Asn Pro Arg Asn Thr Ser Glu Ala Lys Ala Gly Thr
 1625 1630 1635
 Arg Leu Gln Ala Phe Phe His Ile Gln Ala Gln Lys Leu Gly Leu
 1640 1645 1650
 His Val Thr Pro Ser Asn Val Asp Gln Val Ser Thr Pro Pro Ala
 1655 1660 1665

Ala Lys Lys Ser Arg Ile
1670

<210> 2588
<211> 103
<212> PRT
<213> Homo sapiens

<400> 2588

Met Ala Gln Phe Val Arg Asn Leu Val Glu Lys Thr Pro Ala Leu Val
1 5 10 15

Asn Ala Ala Val Thr Tyr Ser Lys Pro Arg Leu Ala Thr Phe Trp Tyr
20 25 30

Tyr Ala Lys Val Glu Leu Val Pro Pro Thr Pro Ala Glu Ile Pro Arg
35 40 45

Ala Ile Gln Ser Leu Lys Lys Ile Ala Asn Ser Ala Gln Thr Gly Ser
50 55 60

Phe Lys Gln Leu Thr Val Lys Glu Ala Val Leu Asn Gly Leu Val Ala
65 70 75 80

Thr Glu Val Leu Met Trp Phe Tyr Val Gly Glu Ile Ile Gly Lys Arg
85 90 95

Gly Ile Ile Gly Tyr Asp Val
100

<210> 2589
<211> 156
<212> PRT
<213> Homo sapiens

<400> 2589

Met Ser Gly Gly Leu Leu Lys Ala Leu Arg Ser Asp Ser Tyr Val Glu
1 5 10 15

Leu Ser Gln Tyr Arg Asp Gln His Phe Arg Gly Asp Asn Glu Glu Gln
20 25 30

Glu Lys Leu Leu Lys Lys Ser Cys Thr Leu Tyr Val Gly Asn Leu Ser
35 40 45

Phe Tyr Thr Thr Glu Glu Gln Ile Tyr Glu Leu Phe Ser Lys Ser Gly
50 55 60

Asp Ile Lys Lys Ile Ile Met Gly Leu Asp Lys Met Lys Lys Thr Ala
 65 70 75 80

Cys Gly Phe Cys Phe Val Glu Tyr Tyr Ser Arg Ala Asp Ala Glu Asn
 85 90 95

Ala Met Arg Tyr Ile Asn Gly Thr Arg Leu Asp Asp Arg Ile Ile Arg
 100 105 110

Thr Asp Trp Asp Ala Gly Phe Lys Glu Gly Arg Gln Tyr Gly Arg Gly
 115 120 125

Arg Ser Gly Gly Gln Val Arg Asp Glu Tyr Arg Gln Asp Tyr Asp Ala
 130 135 140

Gly Arg Gly Gly Tyr Gly Lys Leu Ala Gln Asn Gln
 145 150 155

<210> 2590

<211> 436

<212> PRT

<213> Homo sapiens

<400> 2590

Met Asp Ser Val Ala Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu
 1 5 10 15

Glu Trp Ala Leu Leu Ser Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val
 20 25 30

Thr Leu Glu Thr Phe Arg Asn Leu Ala Ser Val Gly Ile Gln Trp Lys
 35 40 45

Asp Gln Asp Ile Glu Asn Leu Tyr Gln Asn Leu Gly Ile Lys Leu Arg
 50 55 60

Ser Leu Val Glu Arg Leu Cys Gly Arg Lys Glu Gly Asn Glu His Arg
 65 70 75 80

Glu Thr Phe Ser Gln Ile Pro Asp Cys His Leu Asn Lys Lys Ser Gln
 85 90 95

Thr Gly Val Lys Pro Cys Lys Cys Ser Val Cys Gly Lys Val Phe Leu
 100 105 110

Arg His Ser Phe Leu Asp Arg His Met Arg Ala His Ala Gly His Lys
 115 120 125

Arg Ser Glu Cys Gly Gly Glu Trp Arg Glu Thr Pro Arg Lys Gln Lys
 130 135 140

Gln His Gly Lys Ala Ser Ile Ser Pro Ser Ser Gly Ala Arg Arg Thr
 145 150 155 160

Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys Val Cys Gly Lys
 165 170 175

Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln Arg Thr His Thr
 180 185 190

Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg Ala Phe Thr Val
 195 200 205

Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr Gly Glu Lys Arg
 210 215 220

Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr Pro Ser Leu Phe
 225 230 235 240

Gln Ile His Val Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Lys
 245 250 255

Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Leu Arg Thr His Glu
 260 265 270

Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys Gln Glu Cys Gly
 275 280 285

Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His Glu Arg Thr His
 290 295 300

Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Ala Lys Val Phe Arg
 305 310 315 320

Cys Pro Thr Ser Leu Gln Ala His Glu Arg Ala His Thr Gly Glu Arg
 325 330 335

Pro Tyr Glu Cys Asn Lys Cys Gly Lys Thr Phe Asn Tyr Pro Ser Cys
 340 345 350

Phe Arg Arg His Lys Lys Thr His Ser Gly Glu Lys Pro Tyr Glu Cys

355

360

365

Thr Arg Cys Gly Lys Ala Phe Gly Trp Cys Ser Ser Leu Arg Arg His
 370 375 380

Glu Met Thr His Thr Gly Glu Lys Pro Phe Asp Cys Lys Gln Cys Gly
 385 390 395 400

Lys Val Phe Thr Phe Ser Asn Tyr Leu Arg Leu His Glu Arg Thr His
 405 410 415

Leu Ala Gly Arg Ser Gln Cys Phe Gly Arg Arg Gln Gly Asp His Leu
 420 425 430

Ser Pro Gly Val
 435

<210> 2591
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 2591

Met Gln Val Ser Thr Ala Ala Leu Ala Val Leu Leu Cys Thr Met Ala
 1 5 10 15

Leu Cys Asn Gln Phe Ser Ala Ser Leu Ala Ala Asp Thr Pro Thr Ala
 20 25 30

Cys Cys Phe Ser Tyr Thr Ser Arg Gln Ile Pro Gln Asn Phe Ile Ala
 35 40 45

Asp Tyr Phe Glu Thr Ser Ser Gln Cys Ser Lys Pro Gly Val Ile Phe
 50 55 60

Leu Thr Lys Arg Ser Arg Gln Val Cys Ala Asp Pro Ser Glu Glu Trp
 65 70 75 80

Val Gln Lys Tyr Val Ser Asp Leu Glu Leu Ser Ala
 85 90

<210> 2592
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 2592

Met Glu Ala Leu Pro Leu Leu Ala Ala Thr Thr Pro Asp His Gly Arg
 1 5 10 15

His Arg Arg Leu Leu Leu Pro Leu Leu Leu Phe Leu Leu Pro Ala
 20 25 30

Gly Ala Val Gln Gly Trp Glu Thr Glu Glu Arg Pro Arg Thr Arg Glu
 35 40 45

Glu Glu Cys His Phe Tyr Ala Gly Gly Gln Val Tyr Pro Gly Glu Ala
 50 55 60

Ser Arg Val Ser Val Ala Asp His Ser Leu His Leu Ser Lys Ala Lys
 65 70 75 80

Ile Ser Lys Pro Ala Pro Tyr Trp Glu Gly Thr Ala Val Ile Asp Gly
 85 90 95

Glu Phe Lys Glu Leu Lys Leu Thr Asp Tyr Arg Gly Lys Tyr Leu Val
 100 105 110

Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
 115 120 125

Ile Ala Phe Gly Asp Arg Leu Glu Glu Phe Arg Ser Ile Asn Thr Glu
 130 135 140

Val Val Ala Cys Ser Val Asp Ser Gln Phe Thr His Leu Ala Trp Ile
 145 150 155 160

Asn Thr Pro Arg Arg Gln Gly Gly Leu Gly Pro Ile Arg Ile Pro Leu
 165 170 175

Leu Ser Asp Leu Thr His Gln Ile Ser Lys Asp Tyr Gly Val Tyr Leu
 180 185 190

Glu Asp Ser Gly His Thr Leu Arg Gly Leu Phe Ile Ile Asp Asp Lys
 195 200 205

Gly Ile Leu Arg Gln Ile Thr Leu Asn Asp Leu Pro Val Gly Arg Ser
 210 215 220

Val Asp Glu Thr Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Lys
 225 230 235 240

His Gly Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Ser Glu Thr Ile

245

250

255

Ile Pro Asp Pro Ala Gly Lys Leu Lys Tyr Phe Asp Lys Leu Asn
 260 265 270,

<210> 2593

<211> 659

<212> PRT

<213> Homo sapiens

<400> 2593

Met Ala Ala Val Ile Leu Glu Ser Ile Phe Leu Lys Arg Ser Gln Gln
 1 5 10 15

Lys Lys Lys Thr Ser Pro Leu Asn Phe Lys Lys Arg Leu Phe Leu Leu
 20 25 30

Thr Val His Lys Leu Ser Tyr Tyr Glu Tyr Asp Phe Glu Arg Gly Arg
 35 40 45

Arg Gly Ser Lys Lys Gly Ser Ile Asp Val Glu Lys Ile Thr Cys Val
 50 55 60

Glu Thr Val Val Pro Glu Lys Asn Pro Pro Pro Glu Arg Gln Ile Pro
 65 70 75 80

Arg Arg Gly Glu Glu Ser Ser Glu Met Glu Gln Ile Ser Ile Ile Glu
 85 90 95

Arg Phe Pro Tyr Pro Phe Gln Val Val Tyr Asp Glu Gly Pro Leu Tyr
 100 105 110

Val Phe Ser Pro Thr Glu Glu Leu Arg Lys Arg Trp Ile His Gln Leu
 115 120 125

Lys Asn Val Ile Arg Tyr Asn Ser Asp Leu Val Gln Lys Tyr His Pro
 130 135 140

Cys Phe Trp Ile Asp Gly Gln Tyr Leu Cys Cys Ser Gln Thr Ala Lys
 145 150 155 160

Asn Ala Met Gly Cys Gln Ile Leu Glu Asn Arg Asn Gly Ser Leu Lys
 165 170 175

Pro Gly Ser Ser His Arg Lys Thr Lys Lys Pro Leu Pro Pro Thr Pro
 180 185 190

Glu Glu Asp Gln Ile Leu Lys Lys Pro Leu Pro Pro Glu Pro Ala Ala
 195 200 205

Ala Pro Val Ser Thr Ser Glu Leu Lys Lys Val Val Ala Leu Tyr Asp
 210 215 220

Tyr Met Pro Met Asn Ala Asn Asp Leu Gln Leu Arg Lys Gly Asp Glu
 225 230 235 240

Tyr Phe Ile Leu Glu Glu Ser Asn Leu Pro Trp Trp Arg Ala Arg Asp
 245 250 255

Lys Asn Gly Gln Glu Gly Tyr Ile Pro Ser Asn Tyr Val Thr Glu Ala
 260 265 270

Glu Asp Ser Ile Glu Met Tyr Glu Trp Tyr Ser Lys His Met Thr Arg
 275 280 285

Ser Gln Ala Glu Gln Leu Leu Lys Gln Glu Gly Lys Glu Gly Gly Phe
 290 295 300

Ile Val Arg Asp Ser Ser Lys Ala Gly Lys Tyr Thr Val Ser Val Phe
 305 310 315 320

Ala Lys Ser Thr Gly Asp Pro Gln Gly Val Ile Arg His Tyr Val Val
 325 330 335

Cys Ser Thr Pro Gln Ser Gln Tyr Tyr Leu Ala Glu Lys His Leu Phe
 340 345 350

Ser Thr Ile Pro Glu Leu Ile Asn Tyr His Gln His Asn Ser Ala Gly
 355 360 365

Leu Ile Ser Arg Leu Lys Tyr Pro Val Ser Gln Gln Asn Lys Asn Ala
 370 375 380

Pro Ser Thr Ala Gly Leu Gly Tyr Gly Ser Trp Glu Ile Asp Pro Lys
 385 390 395 400

Asp Leu Thr Phe Leu Lys Glu Leu Gly Thr Gly Gln Phe Gly Val Val
 405 410 415

Lys Tyr Gly Lys Trp Arg Gly Gln Tyr Asp Val Ala Ile Lys Met Ile
 420 425 430

Lys Glu Gly Ser Met Ser Glu Asp Glu Phe Ile Glu Glu Ala Lys Val
 435 440 445

Met Met Asn Leu Ser His Glu Lys Leu Val Gln Leu Tyr Gly Val Cys
 450 455 460

Thr Lys Gln Arg Pro Ile Phe Ile Ile Thr Glu Tyr Met Ala Asn Gly
 465 470 475 480

Cys Leu Leu Asn Tyr Leu Arg Glu Met Arg His Arg Phe Gln Thr Gln
 485 490 495

Gln Leu Leu Glu Met Cys Lys Asp Val Cys Glu Ala Met Glu Tyr Leu
 500 505 510

Glu Ser Lys Gln Phe Leu His Arg Asp Leu Ala Ala Arg Asn Cys Leu
 515 520 525

Val Asn Asp Gln Gly Val Val Lys Val Ser Asp Phe Gly Leu Ser Arg
 530 535 540

Tyr Val Leu Asp Asp Glu Tyr Thr Ser Ser Val Gly Ser Lys Phe Pro
 545 550 555 560

Val Arg Trp Ser Pro Pro Glu Val Leu Met Tyr Ser Lys Phe Ser Ser
 565 570 575

Lys Ser Asp Ile Trp Ala Phe Gly Val Leu Met Trp Glu Ile Tyr Ser
 580 585 590

Leu Gly Lys Met Pro Tyr Glu Arg Phe Thr Asn Ser Glu Thr Ala Glu
 595 600 605

His Ile Ala Gln Gly Leu Arg Leu Tyr Arg Pro His Leu Ala Ser Glu
 610 615 620

Lys Val Tyr Thr Ile Met Tyr Ser Cys Trp His Glu Lys Ala Asp Glu
 625 630 635 640

Arg Pro Thr Phe Lys Ile Leu Leu Ser Asn Ile Leu Asp Val Met Asp
 645 650 655

Glu Glu Ser

<210> 2594

<211> 417
 <212> PRT
 <213> Homo sapiens

<400> 2594

Met Ser Leu Ser Asn Lys Leu Thr Leu Asp Lys Leu Asp Val Lys Gly
 1 5 10 15

Lys Arg Val Val Met Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn
 20 25 30

Gln Ile Thr Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys
 35 40 45

Phe Cys Leu Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu
 50 55 60

Gly Arg Pro Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro
 65 70 75 80

Val Ala Val Glu Leu Lys Ser Leu Leu Gly Lys Asp Val Leu Phe Leu
 85 90 95

Lys Asp Cys Val Gly Pro Glu Val Glu Lys Ala Cys Ala Asn Pro Ala
 100 105 110

Ala Gly Ser Val Ile Leu Leu Glu Asn Leu Arg Phe His Val Glu Glu
 115 120 125

Glu Gly Lys Gly Lys Asp Ala Ser Gly Asn Lys Val Lys Ala Glu Pro
 130 135 140

Ala Lys Ile Glu Ala Phe Arg Ala Ser Leu Ser Lys Leu Gly Asp Val
 145 150 155 160

Tyr Val Asn Asp Ala Phe Gly Thr Ala His Arg Ala His Ser Ser Met
 165 170 175

Val Gly Val Asn Leu Pro Gln Lys Ala Gly Gly Phe Leu Met Lys Lys
 180 185 190

Glu Leu Asn Tyr Phe Ala Lys Ala Leu Glu Ser Pro Glu Arg Pro Phe
 195 200 205

Leu Ala Ile Leu Gly Gly Ala Lys Val Ala Asp Lys Ile Gln Leu Ile
 210 215 220

```

Asn Asn Met Leu Asp Lys Val Asn Glu Met Ile Ile Gly Gly Gly Met
225                230                235                240

Ala Phe Thr Phe Leu Lys Val Leu Asn Asn Met Glu Ile Gly Thr Ser
                245                250                255

Leu Phe Asp Glu Glu Gly Ala Lys Ile Val Lys Asp Leu Met Ser Lys
                260                265                270

Ala Glu Lys Asn Gly Val Lys Ile Thr Leu Pro Val Asp Phe Val Thr
                275                280                285

Ala Asp Lys Phe Asp Glu Asn Ala Lys Thr Gly Gln Ala Thr Val Ala
                290                295                300

Ser Gly Ile Pro Ala Gly Trp Met Gly Leu Asp Cys Gly Pro Glu Ser
305                310                315                320

Ser Lys Lys Tyr Ala Glu Ala Val Thr Arg Ala Lys Gln Ile Val Trp
                325                330                335

Asn Gly Pro Val Gly Val Phe Glu Trp Glu Ala Phe Ala Arg Gly Thr
                340                345                350

Lys Ala Leu Met Asp Glu Val Val Lys Ala Thr Ser Arg Gly Cys Ile
                355                360                365

Thr Ile Ile Gly Gly Gly Asp Thr Ala Thr Cys Cys Ala Lys Trp Asn
370                375                380

Thr Glu Asp Lys Val Ser His Val Ser Thr Gly Gly Gly Ala Ser Leu
385                390                395                400

Glu Leu Leu Glu Gly Lys Val Leu Pro Gly Val Asp Ala Leu Ser Asn
                405                410                415

Ile

<210> 2595
<211> 468
<212> PRT
<213> Homo sapiens

<400> 2595

Met Ala Pro Pro Pro Ala Arg Val His Leu Gly Ala Phe Leu Ala Val

```


1 5 10 15

Thr Pro Asn Pro Gly Ser Ala Ala Ser Gly Thr Glu Ala Ala Ala Ala
20 25 30

Thr Pro Ser Lys Val Trp Gly Ser Ser Ala Gly Arg Ile Glu Pro Arg
35 40 45

Gly Gly Gly Arg Gly Ala Leu Pro Thr Ser Met Gly Gln His Gly Pro
50 55 60

Ser Ala Arg Ala Arg Ala Gly Arg Ala Pro Gly Pro Arg Pro Ala Arg
65 70 75 80

Glu Ala Ser Pro Arg Leu Arg Val His Lys Thr Phe Lys Phe Val Val
85 90 95

Val Gly Val Leu Leu Gln Val Val Pro Ser Ser Ala Ala Thr Ile Lys
100 105 110

Leu His Asp Gln Ser Ile Gly Thr Gln Gln Trp Glu His Ser Pro Leu
115 120 125

Gly Glu Leu Cys Pro Pro Gly Ser His Arg Ser Glu His Pro Gly Ala
130 135 140

Cys Asn Arg Cys Thr Glu Gly Val Gly Tyr Thr Asn Ala Ser Asn Asn
145 150 155 160

Leu Phe Ala Cys Leu Pro Cys Thr Ala Cys Lys Ser Asp Glu Glu Glu
165 170 175

Arg Ser Pro Cys Thr Thr Thr Arg Asn Thr Ala Cys Gln Cys Lys Pro
180 185 190

Gly Thr Phe Arg Asn Asp Asn Ser Ala Glu Met Cys Arg Lys Cys Ser
195 200 205

Arg Gly Cys Pro Arg Gly Met Val Lys Val Lys Asp Cys Thr Pro Trp
210 215 220

Ser Asp Ile Glu Cys Val His Lys Glu Ser Gly Asn Gly His Asn Ile
225 230 235 240

Trp Val Ile Leu Val Val Thr Leu Val Val Pro Leu Leu Leu Val Ala
245 250 255

Val Leu Ile Val Cys Cys Cys Ile Gly Ser Gly Cys Gly Gly Asp Pro
 260 265 270

Lys Cys Met Asp Arg Val Cys Phe Trp Arg Leu Gly Leu Leu Arg Gly
 275 280 285

Pro Gly Ala Glu Asp Asn Ala His Asn Glu Ile Leu Ser Asn Ala Asp
 290 295 300

Ser Leu Ser Thr Phe Val Ser Glu Gln Gln Met Glu Ser Gln Glu Pro
 305 310 315 320

Ala Asp Leu Thr Gly Val Thr Val Gln Ser Pro Gly Glu Ala Gln Cys
 325 330 335

Leu Leu Gly Pro Ala Glu Ala Glu Gly Ser Gln Arg Arg Arg Leu Leu
 340 345 350

Val Pro Ala Asn Gly Ala Asp Pro Thr Glu Thr Leu Met Leu Phe Phe
 355 360 365

Asp Lys Phe Ala Asn Ile Val Pro Phe Asp Ser Trp Asp Gln Leu Met
 370 375 380

Arg Gln Leu Asp Leu Thr Lys Asn Glu Ile Asp Val Val Arg Ala Gly
 385 390 395 400

Thr Ala Gly Pro Gly Asp Ala Leu Tyr Ala Met Leu Met Lys Trp Val
 405 410 415

Asn Lys Thr Gly Arg Asn Ala Ser Ile His Thr Leu Leu Asp Ala Leu
 420 425 430

Glu Arg Met Glu Glu Arg His Ala Lys Glu Lys Ile Gln Asp Leu Leu
 435 440 445

Val Asp Ser Gly Lys Phe Ile Tyr Leu Glu Asp Gly Thr Gly Ser Ala
 450 455 460

Val Ser Leu Glu
 465

<210> 2596
 <211> 185
 <212> PRT

<213> Homo sapiens

<400> 2596

Met Lys Leu Val Ser Val Ala Leu Met Tyr Leu Gly Ser Leu Ala Phe
 1 5 10 15

Leu Gly Ala Asp Thr Ala Arg Leu Asp Val Ala Ser Glu Phe Arg Lys
 20 25 30

Lys Trp Asn Lys Trp Ala Leu Ser Arg Gly Lys Arg Glu Leu Arg Met
 35 40 45

Ser Ser Ser Tyr Pro Thr Gly Leu Ala Asp Val Lys Ala Gly Pro Ala
 50 55 60

Gln Thr Leu Ile Arg Pro Gln Asp Met Lys Gly Ala Ser Arg Ser Pro
 65 70 75 80

Glu Asp Ser Ser Pro Asp Ala Ala Arg Ile Arg Val Lys Arg Tyr Arg
 85 90 95

Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys Arg Phe
 100 105 110

Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln Phe Thr
 115 120 125

Asp Lys Asp Lys Asp Asn Val Ala Pro Arg Ser Lys Ile Ser Pro Gln
 130 135 140

Gly Tyr Gly Arg Arg Arg Arg Arg Ser Leu Pro Glu Ala Gly Pro Gly
 145 150 155 160

Arg Thr Leu Val Ser Ser Lys Pro Gln Ala His Gly Ala Pro Ala Pro
 165 170 175

Pro Ser Gly Ser Ala Pro His Phe Leu
 180 185

<210> 2597

<211> 851

<212> PRT

<213> Homo sapiens

<400> 2597

Met Ser Ser Lys Gln Glu Ile Met Ser Asp Gln Arg Phe Arg Arg Val
 1 5 10 15

Ala Lys Asp Pro Arg Phe Trp Glu Met Pro Glu Lys Asp Arg Lys Val
 20 25 30

Lys Ile Asp Lys Arg Phe Arg Ala Met Phe His Asp Lys Lys Phe Lys
 35 40 45

Leu Asn Tyr Ala Val Asp Lys Arg Gly Arg Pro Ile Ser His Ser Thr
 50 55 60

Thr Glu Asp Leu Lys Arg Phe Tyr Asp Leu Ser Asp Ser Asp Ser Asn
 65 70 75 80

Leu Ser Gly Glu Asp Ser Lys Ala Leu Ser Gln Lys Lys Ile Lys Lys
 85 90 95

Lys Lys Thr Gln Thr Lys Lys Glu Ile Asp Ser Lys Asn Leu Val Glu
 100 105 110

Lys Lys Lys Glu Thr Lys Lys Ala Asn His Lys Gly Ser Glu Asn Lys
 115 120 125

Thr Asp Leu Asp Asn Ser Ile Gly Ile Lys Lys Met Lys Thr Ser Cys
 130 135 140

Lys Phe Lys Ile Asp Ser Asn Ile Ser Pro Lys Lys Asp Ser Lys Glu
 145 150 155 160

Phe Thr Gln Lys Asn Lys Lys Glu Lys Lys Asn Ile Val Gln His Thr
 165 170 175

Thr Asp Ser Ser Leu Glu Glu Lys Gln Arg Thr Leu Asp Ser Gly Thr
 180 185 190

Ser Glu Ile Val Lys Ser Pro Arg Ile Glu Cys Ser Lys Thr Arg Arg
 195 200 205

Glu Met Gln Ser Val Val Gln Leu Ile Met Thr Arg Asp Ser Asp Gly
 210 215 220

Tyr Glu Asn Ser Thr Asp Gly Glu Met Cys Asp Lys Asp Ala Leu Glu
 225 230 235 240

Glu Asp Ser Glu Ser Val Ser Glu Ile Gly Ser Asp Glu Glu Ser Glu
 245 250 255

Asn Glu Ile Thr Ser Val Gly Arg Ala Ser Gly Asp Asp Asp Gly Ser
 260 265 270

Glu Asp Asp Glu Glu Glu Asp Glu Asp Glu Glu Glu Asp Glu Asp Glu
 275 280 285

Asp Ser Glu Asp Asp Asp Lys Ser Asp Ser Gly Pro Asp Leu Ala Arg
 290 295 300

Gly Lys Gly Asn Ile Glu Thr Ser Ser Glu Asp Glu Asp Asp Thr Ala
 305 310 315 320

Asp Leu Phe Pro Glu Glu Ser Gly Phe Glu His Ala Trp Arg Glu Leu
 325 330 335

Asp Lys Asp Ala Pro Arg Ala Asp Glu Ile Thr Arg Arg Leu Ala Val
 340 345 350

Cys Asn Met Asp Trp Asp Arg Leu Lys Ala Lys Asp Leu Leu Ala Leu
 355 360 365

Phe Asn Ser Phe Lys Pro Lys Gly Gly Val Ile Phe Ser Val Lys Ile
 370 375 380

Tyr Pro Ser Glu Phe Gly Lys Glu Arg Met Lys Glu Glu Gln Val Gln
 385 390 395 400

Gly Pro Val Glu Leu Leu Ser Ile Pro Glu Asp Ala Pro Glu Lys Asp
 405 410 415

Trp Thr Ser Arg Glu Lys Leu Arg Asp Tyr Gln Phe Lys Arg Leu Lys
 420 425 430

Tyr Tyr Tyr Ala Val Val Asp Cys Asp Ser Pro Glu Thr Ala Ser Lys
 435 440 445

Ile Tyr Glu Asp Cys Asp Gly Leu Glu Phe Glu Ser Ser Cys Ser Phe
 450 455 460

Ile Asp Leu Arg Phe Ile Pro Asp Asp Ile Thr Phe Asp Asp Glu Pro
 465 470 475 480

Lys Asp Val Ala Ser Glu Val Asn Leu Thr Ala Tyr Lys Pro Lys Tyr
 485 490 495

Phe Thr Ser Ala Ala Met Gly Thr Ser Thr Val Glu Ile Thr Trp Asp
 500 505 510

Glu Thr Asp His Glu Arg Ile Thr Met Leu Asn Arg Lys Phe Lys Lys
 515 520 525

Glu Glu Leu Leu Asp Met Asp Phe Gln Ala Tyr Leu Ala Ser Ser Ser
 530 535 540

Glu Asp Glu Glu Glu Ile Glu Glu Glu Leu Gln Gly Asp Asp Gly Val
 545 550 555 560

Asn Val Glu Glu Asp Gly Lys Thr Lys Lys Ser Gln Lys Asp Asp Glu
 565 570 575

Glu Gln Ile Ala Lys Tyr Arg Gln Leu Leu Gln Val Ile Gln Glu Lys
 580 585 590

Glu Lys Lys Gly Lys Glu Asn Asp Met Glu Met Glu Ile Lys Trp Val
 595 600 605

Pro Gly Leu Lys Glu Ser Ala Glu Glu Met Val Lys Asn Lys Leu Glu
 610 615 620

Gly Lys Asp Lys Leu Thr Pro Trp Glu Gln Phe Leu Glu Lys Lys Lys
 625 630 635 640

Glu Lys Lys Arg Leu Lys Arg Lys Gln Lys Ala Leu Ala Glu Glu Ala
 645 650 655

Ser Glu Glu Glu Leu Pro Ser Asp Val Asp Leu Asn Asp Pro Tyr Phe
 660 665 670

Ala Glu Glu Val Lys Gln Ile Gly Ile Asn Lys Lys Ser Val Lys Ser
 675 680 685

Ala Lys Asp Gly Thr Ser Pro Glu Glu Glu Ile Glu Ile Glu Arg Gln
 690 695 700

Lys Ala Glu Met Ala Leu Leu Met Met Asp Glu Asp Glu Asp Ser Lys
 705 710 715 720

Lys His Phe Asn Tyr Asn Lys Ile Val Glu His Gln Asn Leu Ser Lys
 725 730 735

Lys Lys Lys Lys Gln Leu Met Lys Lys Lys Glu Leu Ile Glu Asp Asp

740

745

750

Phe Glu Val Asn Val Asn Asp Ala Arg Phe Gln Ala Met Tyr Thr Ser
 755 760 765

His Leu Phe Asn Leu Asp Pro Ser Asp Pro Asn Phe Lys Lys Thr Lys
 770 775 780

Ala Met Glu Lys Ile Leu Glu Glu Lys Ala Arg Gln Arg Glu Arg Lys
 785 790 795 800

Glu Gln Glu Leu Thr Gln Ala Ile Lys Lys Lys Glu Ser Glu Ile Glu
 805 810 815

Lys Glu Ser Gln Arg Lys Ser Ile Asp Pro Ala Leu Ser Met Leu Ile
 820 825 830

Lys Ser Ile Lys Thr Lys Thr Glu Gln Phe Gln Ala Arg Lys Lys Gln
 835 840 845

Lys Val Lys
 850

<210> 2598

<211> 244

<212> PRT

<213> Homo sapiens

<400> 2598

Met Val Tyr Lys Thr Leu Phe Ala Leu Cys Ile Leu Thr Ala Gly Trp
 1 5 10 15

Arg Val Gln Ser Leu Pro Thr Ser Ala Pro Leu Ser Val Ser Leu Pro
 20 25 30

Thr Asn Ile Val Pro Pro Thr Thr Ile Trp Thr Ser Ser Pro Gln Asn
 35 40 45

Thr Asp Ala Asp Thr Ala Ser Pro Ser Asn Gly Thr His Asn Asn Ser
 50 55 60

Val Leu Pro Val Thr Ala Ser Ala Pro Thr Ser Leu Leu Pro Lys Asn
 65 70 75 80

Ile Ser Ile Glu Ser Arg Glu Glu Glu Ile Thr Ser Pro Gly Ser Asn
 85 90 95

Trp Glu Gly Thr Asn Thr Asp Pro Ser Pro Ser Gly Phe Ser Ser Thr
 100 105 110

Ser Gly Gly Val His Leu Thr Thr Thr Leu Glu Glu His Ser Leu Gly
 115 120 125

Thr Pro Glu Ala Gly Val Ala Ala Thr Leu Ser Gln Ser Ala Ala Glu
 130 135 140

Pro Pro Thr Leu Ile Ser Pro Gln Ala Pro Ala Ser Ser Pro Ser Ser
 145 150 155 160

Leu Ser Thr Ser Pro Pro Glu Val Phe Ser Ala Ser Val Thr Thr Asn
 165 170 175

His Ser Ser Thr Val Thr Ser Thr Gln Pro Thr Gly Ala Pro Thr Ala
 180 185 190

Pro Glu Ser Pro Thr Glu Glu Ser Ser Ser Asp His Thr Pro Thr Ser
 195 200 205

His Ala Thr Ala Glu Pro Val Pro Gln Glu Lys Thr Pro Pro Thr Thr
 210 215 220

Val Ser Gly Lys Val Met Cys Glu Leu Ile Asp Met Glu Thr Pro Pro
 225 230 235 240

Pro Phe Pro Gly

<210> 2599

<211> 395

<212> PRT

<213> Homo sapiens

<400> 2599

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu

[illegible]

Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln Thr Asn
 305 310 315 320

Tyr Asp Arg Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg Thr Pro
 325 335

Ala Lys Met Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser Phe Glu
 340 345 350

Thr Met Tyr Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys Leu Thr
 355 360 365

Val Tyr Thr Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr
 370 375 380

Leu Arg Asp Cys Pro Asp Pro Cys Ile Gly Trp
 385 390 395

<210> 2600

<211> 282

<212> PRT

<213> Homo sapiens

<400> 2600

Met Ser Leu Leu Ala Thr Leu Gly Leu Glu Leu Asp Arg Ala Leu Leu
 1 5 10 15

Pro Ala Ser Gly Leu Gly Trp Leu Val Asp Tyr Gly Lys Leu Pro Pro
 20 25 30

Ala Pro Ala Pro Leu Ala Pro Tyr Glu Val Leu Gly Gly Ala Leu Glu
 35 40 45

Gly Gly Leu Pro Val Gly Gly Glu Pro Leu Ala Gly Asp Gly Phe Ser
 50 55 60

Asp Trp Met Thr Glu Arg Val Asp Phe Thr Ala Leu Leu Pro Leu Glu
 65 70 75 80

Pro Pro Leu Pro Pro Gly Thr Leu Pro Gln Pro Ser Pro Thr Pro Pro
 85 90 95

Asp Leu Glu Ala Met Ala Ser Leu Leu Lys Lys Glu Leu Glu Gln Met
 100 105 110

Glu Asp Phe Phe Leu Asp Ala Pro Pro Leu Pro Pro Ser Pro Pro
 115 120 125

Pro Leu Pro Pro Pro Pro Leu Pro Pro Ala Pro Ser Leu Pro Leu Ser
 130 135 140

Leu Pro Ser Phe Asp Leu Pro Gln Pro Pro Val Leu Asp Thr Leu Asp
 145 150 155 160

Leu Leu Ala Ile Tyr Cys Arg Asn Glu Ala Gly Gln Glu Glu Val Gly
 165 170 175

Met Pro Pro Leu Pro Pro Pro Gln Gln Pro Pro Pro Ser Pro Pro
 180 185 190

Gln Pro Ser Arg Leu Ala Pro Tyr Pro His Pro Ala Thr Thr Arg Gly
 195 200 205

Asp Arg Lys Gln Lys Lys Arg Asp Gln Asn Lys Ser Ala Ala Leu Arg
 210 215 220

Tyr Arg Gln Arg Lys Arg Ala Glu Gly Glu Ala Leu Glu Gly Glu Cys
 225 230 235 240

Gln Gly Leu Glu Ala Arg Asn Arg Glu Leu Lys Glu Arg Ala Glu Ser
 245 250 255

Val Glu Arg Glu Ile Gln Tyr Val Lys Asp Leu Leu Ile Glu Val Tyr
 260 265 270

Lys Ala Arg Ser Gln Arg Thr Arg Ser Cys
 275 280

<210> 2601

<211> 23

<212> PRT

<213> Homo sapiens

<400> 2601

Met Glu Thr Ser Glu Gly Pro Gly Leu Glu Ser Thr Gly Ser Tyr Leu
 1 5 10 15

Gly Ile Gln Gln Arg Ser Pro
 20

<210> 2602

<211> 491

<212> PRT

<213> Homo sapiens

<400> 2602

Met Cys Asn Thr Asn Met Ser Val Pro Thr Asp Gly Ala Val Thr Thr
 1 5 10 15

Ser Gln Ile Pro Ala Ser Glu Gln Glu Thr Leu Val Arg Pro Lys Pro
 20 25 30

Leu Leu Leu Lys Leu Leu Lys Ser Val Gly Ala Gln Lys Asp Thr Tyr
 35 40 45

Thr Met Lys Glu Val Leu Phe Tyr Leu Gly Gln Tyr Ile Met Thr Lys
 50 55 60

Arg Leu Tyr Asp Glu Lys Gln Gln His Ile Val Tyr Cys Ser Asn Asp
 65 70 75 80

Leu Leu Gly Asp Leu Phe Gly Val Pro Ser Phe Ser Val Lys Glu His
 85 90 95

Arg Lys Ile Tyr Thr Met Ile Tyr Arg Asn Leu Val Val Val Asn Gln
 100 105 110

Gln Glu Ser Ser Asp Ser Gly Thr Ser Val Ser Glu Asn Arg Cys His
 115 120 125

Leu Glu Gly Gly Ser Asp Gln Lys Asp Leu Val Gln Glu Leu Gln Glu
 130 135 140

Glu Lys Pro Ser Ser Ser His Leu Val Ser Arg Pro Ser Thr Ser Ser
 145 150 155 160

Arg Arg Arg Ala Ile Ser Glu Thr Glu Glu Asn Ser Asp Glu Leu Ser
 165 170 175

Gly Glu Arg Gln Arg Lys Arg His Lys Ser Asp Ser Ile Ser Leu Ser
 180 185 190

Phe Asp Glu Ser Leu Ala Leu Cys Val Ile Arg Glu Ile Cys Cys Glu
 195 200 205

Arg Ser Ser Ser Ser Glu Ser Thr Gly Thr Pro Ser Asn Pro Asp Leu
 210 215 220

Asp Ala Gly Val Ser Glu His Ser Gly Asp Trp Leu Asp Gln Asp Ser
 225 230 235 240

Val Ser Asp Gln Phe Ser Val Glu Phe Glu Val Glu Ser Leu Asp Ser
 245 250 255

Glu Asp Tyr Ser Leu Ser Glu Glu Gly Gln Glu Leu Ser Asp Glu Asp
 260 265 270

Asp Glu Val Tyr Gln Val Thr Val Tyr Gln Ala Gly Glu Ser Asp Thr
 275 280 285

Asp Ser Phe Glu Glu Asp Pro Glu Ile Ser Leu Ala Asp Tyr Trp Lys
 290 295 300

Cys Thr Ser Cys Asn Glu Met Asn Pro Pro Leu Pro Ser His Cys Asn
 305 310 315 320

Arg Cys Trp Ala Leu Arg Glu Asn Trp Leu Pro Glu Asp Lys Gly Lys
 325 330 335

Asp Lys Gly Glu Ile Ser Glu Lys Ala Lys Leu Glu Asn Ser Thr Gln
 340 345 350

Ala Glu Glu Gly Phe Asp Val Pro Asp Cys Lys Lys Thr Ile Val Asn
 355 360 365

Asp Ser Arg Glu Ser Cys Val Glu Glu Asn Asp Asp Lys Ile Thr Gln
 370 375 380

Ala Ser Gln Ser Gln Glu Ser Glu Asp Tyr Ser Gln Pro Ser Thr Ser
 385 390 395 400

Ser Ser Ile Ile Tyr Ser Ser Gln Glu Asp Val Lys Glu Phe Glu Arg
 405 410 415

Glu Glu Thr Gln Asp Lys Glu Glu Ser Val Glu Ser Ser Leu Pro Leu
 420 425 430

Asn Ala Ile Glu Pro Cys Val Ile Cys Gln Gly Arg Pro Lys Asn Gly
 435 440 445

Cys Ile Val His Gly Lys Thr Gly His Leu Met Ala Cys Phe Thr Cys
 450 455 460

Ala Lys Lys Leu Lys Lys Arg Asn Lys Pro Cys Pro Val Cys Arg Gln

465

470

475

480

Pro Ile Gln Met Ile Val Leu Thr Tyr Phe Pro
 485 490

<210> 2603

<211> 950

<212> PRT

<213> Homo sapiens

<400> 2603

Met Gly Val Pro Ala Phe Phe Arg Trp Leu Ser Arg Lys Tyr Pro Ser
 1 5 10 15

Ile Ile Val Asn Cys Val Glu Glu Lys Pro Lys Glu Cys Asn Gly Val
 20 25 30

Lys Ile Pro Val Asp Ala Ser Lys Pro Asn Pro Asn Asp Val Glu Phe
 35 40 45

Asp Asn Leu Tyr Leu Asp Met Asn Gly Ile Ile His Pro Cys Thr His
 50 55 60

Pro Glu Asp Lys Pro Ala Pro Lys Asn Glu Asp Glu Met Met Val Ala
 65 70 75 80

Ile Phe Glu Tyr Ile Asp Arg Leu Phe Ser Ile Val Arg Pro Arg Arg
 85 90 95

Leu Leu Tyr Met Ala Ile Asp Gly Val Ala Pro Arg Ala Lys Met Asn
 100 105 110

Gln Gln Arg Ser Arg Arg Phe Arg Ala Ser Lys Glu Gly Met Glu Ala
 115 120 125

Ala Val Glu Lys Gln Arg Val Arg Glu Glu Ile Leu Ala Lys Gly Gly
 130 135 140

Phe Leu Pro Pro Glu Glu Ile Lys Glu Arg Phe Asp Ser Asn Cys Ile
 145 150 155 160

Thr Pro Gly Thr Glu Phe Met Asp Asn Leu Ala Lys Cys Leu Arg Tyr
 165 170 175

Tyr Ile Ala Asp Arg Leu Asn Asn Asp Pro Gly Trp Lys Asn Leu Thr
 180 185 190

Val Ile Leu Ser Asp Ala Ser Ala Pro Gly Glu Gly Glu His Lys Ile
 195 200 205
 Met Asp Tyr Ile Arg Arg Gln Arg Ala Gln Pro Asn His Asp Pro Asn
 210 215 220
 Thr His His Cys Leu Cys Gly Ala Asp Ala Asp Leu Ile Met Leu Gly
 225 230 235 240
 Leu Ala Thr His Glu Pro Asn Phe Thr Ile Ile Arg Glu Glu Phe Lys
 245 250 255
 Pro Asn Lys Pro Lys Pro Cys Gly Leu Cys Asn Gln Phe Gly His Glu
 260 265 270
 Val Lys Asp Cys Glu Gly Leu Pro Arg Glu Lys Lys Gly Lys His Asp
 275 280 285
 Glu Leu Ala Asp Ser Leu Pro Cys Ala Glu Gly Glu Phe Ile Phe Leu
 290 295 300
 Arg Leu Asn Val Leu Arg Glu Tyr Leu Glu Arg Glu Leu Thr Met Ala
 305 310 315 320
 Ser Leu Pro Phe Thr Phe Asp Val Glu Arg Ser Ile Asp Asp Trp Val
 325 330 335
 Phe Met Cys Phe Phe Val Gly Asn Asp Phe Leu Pro His Leu Pro Ser
 340 345 350
 Leu Glu Ile Arg Glu Asn Ala Ile Asp Arg Leu Val Asn Ile Tyr Lys
 355 360 365
 Asn Val Val His Lys Thr Gly Gly Tyr Leu Thr Glu Ser Gly Tyr Val
 370 375 380
 Asn Leu Gln Arg Val Gln Met Ile Met Leu Ala Val Gly Glu Val Glu
 385 390 395 400
 Asp Ser Ile Phe Lys Lys Arg Lys Asp Asp Glu Asp Ser Phe Arg Arg
 405 410 415
 Arg Gln Lys Glu Lys Arg Lys Arg Met Lys Arg Asp Gln Pro Ala Phe
 420 425 430

Thr Pro Ser Gly Ile Leu Thr Pro His Ala Leu Gly Ser Arg Asn Ser
 435 440 445

Pro Gly Ser Gln Val Ala Ser Asn Pro Arg Gln Ala Ala Tyr Glu Met
 450 455 460

Arg Met Gln Asn Asn Ser Ser Pro Ser Ile Ser Pro Asn Thr Ser Phe
 465 470 475 480

Thr Ser Asp Gly Ser Pro Ser Pro Leu Gly Gly Ile Lys Arg Lys Ala
 485 490 495

Glu Asp Ser Asp Ser Glu Pro Glu Pro Glu Asp Asn Val Arg Leu Trp
 500 505 510

Glu Ala Gly Trp Lys Gln Arg Tyr Tyr Lys Asn Lys Phe Asp Val Asp
 515 520 525

Ala Ala Asp Glu Lys Phe Arg Arg Lys Val Val Gln Ser Tyr Val Glu
 530 535 540

Gly Leu Cys Trp Val Leu Arg Tyr Tyr Tyr Gln Gly Cys Ala Ser Trp
 545 550 555 560

Lys Trp Tyr Tyr Pro Phe His Tyr Ala Pro Phe Ala Ser Asp Phe Glu
 565 570 575

Gly Ile Ala Asp Met Pro Ser Asp Phe Glu Lys Gly Thr Lys Pro Phe
 580 585 590

Lys Pro Leu Glu Gln Leu Met Gly Val Phe Pro Ala Ala Ser Gly Asn
 595 600 605

Phe Leu Pro Pro Ser Trp Arg Lys Leu Met Ser Asp Pro Asp Ser Ser
 610 615 620

Ile Ile Asp Phe Tyr Pro Glu Asp Phe Ala Ile Asp Leu Asn Gly Lys
 625 630 635 640

Lys Tyr Ala Trp Gln Gly Val Ala Leu Leu Pro Phe Val Asp Glu Arg
 645 650 655

Arg Leu Arg Ala Ala Leu Glu Glu Val Tyr Pro Asp Leu Thr Pro Glu
 660 665 670

Glu Thr Arg Arg Asn Ser Leu Gly Gly Asp Val Leu Phe Val Gly Lys

675	680	685
His His Pro Leu His Asp Phe Ile Leu Glu Leu Tyr Gln Thr Gly Ser 690 695 700		
Thr Glu Pro Val Glu Val Pro Pro Glu Leu Cys His Gly Ile Gln Gly 705 710 715 720		
Lys Phe Ser Leu Asp Glu Glu Ala Ile Leu Pro Asp Gln Ile Val Cys 725 730 735		
Ser Pro Val Pro Met Leu Arg Asp Leu Thr Gln Asn Thr Val Val Ser 740 745 750		
Ile Asn Phe Lys Asp Pro Gln Phe Ala Glu Asp Tyr Ile Phe Lys Ala 755 760 765		
Val Met Leu Pro Gly Ala Arg Lys Pro Ala Ala Val Leu Lys Pro Ser 770 775 780		
Asp Trp Glu Lys Ser Ser Asn Gly Arg Gln Trp Lys Pro Gln Leu Gly 785 790 795 800		
Phe Asn Arg Asp Arg Arg Pro Val His Leu Asp Gln Ala Ala Phe Arg 805 810 815		
Thr Leu Gly His Val Met Pro Arg Gly Ser Gly Thr Gly Ile Tyr Ser 820 825 830		
Asn Ala Ala Pro Pro Pro Val Thr Tyr Gln Gly Asn Leu Tyr Arg Pro 835 840 845		
Leu Leu Arg Gly Gln Ala Gln Ile Pro Lys Leu Met Ser Asn Met Arg 850 855 860		
Pro Gln Asp Ser Trp Arg Gly Pro Pro Pro Leu Phe Gln Gln Gln Arg 865 870 875 880		
Phe Asp Arg Gly Val Gly Ala Glu Pro Leu Leu Pro Trp Asn Arg Met 885 890 895		
Leu Gln Thr Gln Asn Ala Ala Phe Gln Pro Asn Gln Tyr Gln Met Leu 900 905 910		
Ala Gly Pro Gly Gly Tyr Pro Pro Arg Arg Asp Asp Arg Gly Gly Arg 915 920 925		

Gln Gly Tyr Pro Arg Glu Gly Arg Lys Tyr Pro Leu Pro Pro Pro Ser
 930 935 940

Gly Arg Tyr Asn Trp Asn
 945 950

<210> 2604
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 2604

Met Ser Gln Ser Arg His Arg Ala Glu Ala Pro Pro Leu Glu Arg Glu
 1 5 10 15

Asp Ser Gly Thr Phe Ser Leu Gly Lys Met Ile Thr Ala Lys Pro Gly
 20 25 30

Lys Thr Pro Ile Gln Val Leu His Glu Tyr Gly Met Lys Thr Lys Asn
 35 40 45

Ile Pro Val Tyr Glu Cys Glu Arg Ser Asp Val Gln Ile His Val Pro
 50 55 60

Thr Phe Thr Phe Arg Val Thr Val Gly Asp Ile Thr Cys Thr Gly Glu
 65 70 75 80

Gly Thr Ser Lys Lys Leu Ala Lys His Arg Ala Ala Glu Ala Ala Ile
 85 90 95

Asn Ile Leu Lys Ala Asn Ala Ser Ile Cys Phe Ala Val Pro Asp Pro
 100 105 110

Leu Met Pro Asp Pro Ser Lys Gln Pro Lys Asn Gln Leu Asn Pro Ile
 115 120 125

Gly Ser Leu Gln Glu Leu Ala Ile His His Gly Trp Arg Leu Pro Glu
 130 135 140

Tyr Thr Leu Ser Gln Glu Gly Gly Pro Ala His Lys Arg Glu Tyr Thr
 145 150 155 160

Thr Ile Cys Arg Leu Glu Ser Phe Met Glu Thr Gly Lys Gly Ala Ser
 165 170 175

Lys Lys Gln Ala Lys Arg Asn Ala Ala Glu Lys Phe Leu Ala Lys Phe
 180 185 190

Ser Asn Ile Ser Pro Glu Asn His Ile Ser Leu Thr Asn Val Val Gly
 195 200 205

His Ser Leu Gly Cys Thr Trp His Ser Leu Arg Asn Ser Pro Gly Glu
 210 215 220

Lys Ile Asn Leu Leu Lys Arg Ser Leu Leu Ser Ile Pro Asn Thr Asp
 225 230 235 240

Tyr Ile Gln Leu Leu Ser Glu Ile Ala Lys Glu Gln Gly Phe Asn Ile
 245 250 255

Thr Tyr Leu Asp Ile Asp Glu Leu Ser Ala Asn Gly Gln Tyr Gln Cys
 260 265 270

Leu Ala Glu Leu Ser Thr Ser Pro Ile Thr Val Cys His Gly Ser Gly
 275 280 285

Ile Ser Cys Gly Asn Ala Gln Ser Asp Ala Ala His Asn Ala Leu Gln
 290 295 300

Tyr Leu Lys Ile Ile Ala Glu Arg Lys
 305 310

<210> 2605

<211> 198

<212> PRT

<213> Homo sapiens

<400> 2605

Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met
 1 5 10 15

Asp Ala Arg Gln Ala Glu His Pro Lys Pro Ser Ala Cys Arg Asn Leu
 20 25 30

Phe Gly Pro Val Asp His Glu Glu Leu Thr Arg Asp Leu Glu Lys His
 35 40 45

Cys Arg Asp Met Glu Glu Ala Ser Gln Arg Lys Trp Asn Phe Asp Phe
 50 55 60

Gln Asn His Lys Pro Leu Glu Gly Lys Tyr Glu Trp Gln Glu Val Glu
 65 70 75 80

Lys Gly Ser Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg Pro Pro Lys
 85 90 95

Gly Ala Cys Lys Val Pro Ala Gln Glu Ser Gln Asp Val Ser Gly Ser
 100 105 110

Arg Pro Ala Ala Pro Leu Ile Gly Ala Pro Ala Asn Ser Glu Asp Thr
 115 120 125

His Leu Val Asp Pro Lys Thr Asp Pro Ser Asp Ser Gln Thr Gly Leu
 130 135 140

Ala Glu Gln Cys Ala Gly Ile Arg Lys Arg Pro Ala Thr Asp Asp Ser
 145 150 155 160

Ser Thr Gln Asn Lys Arg Ala Asn Arg Thr Glu Glu Asn Val Ser Asp
 165 170 175

Gly Ser Pro Asn Ala Gly Ser Val Glu Gln Thr Pro Lys Lys Pro Gly
 180 185 190

Leu Arg Arg Arg Gln Thr
 195

<210> 2606

<211> 727

<212> PRT

<213> Homo sapiens

<400> 2606

Met Arg Pro Leu Leu Leu Ala Leu Leu Gly Trp Leu Leu Ala
 1 5 10 15

Glu Ala Lys Gly Asp Ala Lys Pro Glu Asp Asn Leu Leu Val Leu Thr
 20 25 30

Val Ala Thr Lys Glu Thr Glu Gly Phe Arg Arg Phe Lys Arg Ser Ala
 35 40 45

Gln Phe Phe Asn Tyr Lys Ile Gln Ala Leu Gly Leu Gly Glu Asp Trp
 50 55 60

Asn Val Glu Lys Gly Thr Ser Ala Gly Gly Gly Gln Lys Val Arg Leu
 65 70 75 80

Leu Lys Lys Ala Leu Glu Lys His Ala Asp Lys Glu Asp Leu Val Ile
 85 90 95

Leu Phe Thr Asp Ser Tyr Asp Val Leu Phe Ala Ser Gly Pro Arg Glu
 100 105 110

Leu Leu Lys Lys Phe Arg Gln Ala Arg Ser Gln Val Val Phe Ser Ala
 115 120 125

Glu Glu Leu Ile Tyr Pro Asp Arg Arg Leu Glu Thr Lys Tyr Pro Val
 130 135 140

Val Ser Asp Gly Lys Arg Phe Leu Gly Ser Gly Gly Phe Ile Gly Tyr
 145 150 155 160

Ala Pro Asn Leu Ser Lys Leu Val Ala Glu Trp Glu Gly Gln Asp Ser
 165 170 175

Asp Ser Asp Gln Leu Phe Tyr Thr Lys Ile Phe Leu Asp Pro Glu Lys
 180 185 190

Arg Glu Gln Ile Asn Ile Thr Leu Asp His Arg Cys Arg Ile Phe Gln
 195 200 205

Asn Leu Asp Gly Ala Leu Asp Glu Val Val Leu Lys Phe Glu Met Gly
 210 215 220

His Val Arg Ala Arg Asn Leu Ala Tyr Asp Thr Leu Pro Val Leu Ile
 225 230 235 240

His Gly Asn Gly Pro Thr Lys Leu Gln Leu Asn Tyr Leu Gly Asn Tyr
 245 250 255

Ile Pro Arg Phe Trp Thr Phe Glu Thr Gly Cys Thr Val Cys Asp Glu
 260 265 270

Gly Leu Arg Ser Leu Lys Gly Ile Gly Asp Glu Ala Leu Pro Thr Val
 275 280 285

Leu Val Gly Val Phe Ile Glu Gln Pro Thr Pro Phe Val Ser Leu Phe
 290 295 300

Phe Gln Arg Leu Leu Arg Leu His Tyr Pro Gln Lys His Met Arg Leu
 305 310 315 320

Phe Ile His Asn His Glu Gln His His Lys Ala Gln Val Glu Glu Phe

325

330

335

Leu Ala Gln His Gly Ser Glu Tyr Gln Ser Val Lys Leu Val Gly Pro
 340 345 350

Glu Val Arg Met Ala Asn Ala Asp Ala Arg Asn Met Gly Ala Asp Leu
 355 360 365

Cys Arg Gln Asp Arg Ser Cys Thr Tyr Tyr Phe Ser Val Asp Ala Asp
 370 375 380

Val Ala Leu Thr Glu Pro Asn Ser Leu Arg Leu Leu Ile Gln Gln Asn
 385 390 395 400

Lys Asn Val Ile Ala Pro Leu Met Thr Arg His Gly Arg Leu Trp Ser
 405 410 415

Asn Phe Trp Gly Ala Leu Ser Ala Asp Gly Tyr Tyr Ala Arg Ser Glu
 420 425 430

Asp Tyr Val Asp Ile Val Gln Gly Arg Arg Val Gly Val Trp Asn Val
 435 440 445

Pro Tyr Ile Ser Asn Ile Tyr Leu Ile Lys Gly Ser Ala Leu Arg Gly
 450 455 460

Glu Leu Gln Ser Ser Asp Leu Phe His His Ser Lys Leu Asp Pro Asp
 465 470 475 480

Met Ala Phe Cys Ala Asn Ile Arg Gln Gln Asp Val Phe Met Phe Leu
 485 490 495

Thr Asn Arg His Thr Leu Gly His Leu Leu Ser Leu Asp Ser Tyr Arg
 500 505 510

Thr Thr His Leu His Asn Asp Leu Trp Glu Val Phe Ser Asn Pro Glu
 515 520 525

Asp Trp Lys Glu Lys Tyr Ile His Gln Asn Tyr Thr Lys Ala Leu Ala
 530 535 540

Gly Lys Leu Val Glu Thr Pro Cys Pro Asp Val Tyr Trp Phe Pro Ile
 545 550 555 560

Phe Thr Glu Val Ala Cys Asp Glu Leu Val Glu Glu Met Glu His Phe
 565 570 575

Gly Gln Trp Ser Leu Gly Asn Asn Lys Asp Asn Arg Ile Gln Gly Gly
 580 585 590

Tyr Glu Asn Val Pro Thr Ile Asp Ile His Met Asn Gln Ile Gly Phe
 595 600 605

Glu Arg Glu Trp His Lys Phe Leu Leu Glu Tyr Ile Ala Pro Met Thr
 610 615 620

Glu Lys Leu Tyr Pro Gly Tyr Tyr Thr Arg Ala Gln Phe Asp Leu Ala
 625 630 635 640

Phe Val Val Arg Tyr Lys Pro Asp Glu Gln Pro Ser Leu Met Pro His
 645 650 655

His Asp Ala Ser Thr Phe Thr Ile Asn Ile Ala Leu Asn Arg Val Gly
 660 665 670

Val Asp Tyr Glu Gly Gly Gly Cys Arg Phe Leu Arg Tyr Asn Cys Ser
 675 680 685

Ile Arg Ala Pro Arg Lys Gly Trp Thr Leu Met His Pro Gly Arg Leu
 690 695 700

Thr His Tyr His Glu Gly Leu Pro Thr Thr Arg Gly Thr Arg Tyr Ile
 705 710 715 720

Ala Val Ser Phe Val Asp Pro
 725

<210> 2607

<211> 537

<212> PRT

<213> Homo sapiens

<400> 2607

Met Ala Trp Arg Gly Ala Gly Pro Ser Val Pro Gly Ala Pro Gly Gly
 1 5 10 15

Val Gly Leu Ser Leu Gly Leu Leu Leu Gln Leu Leu Leu Leu Gly
 20 25 30

Pro Ala Arg Gly Phe Gly Asp Glu Glu Glu Arg Arg Cys Asp Pro Ile
 35 40 45

Arg Ile Ser Met Cys Gln Asn Leu Gly Tyr Asn Val Thr Lys Met Pro
 50 55 60

Asn Leu Val Gly His Glu Leu Gln Thr Asp Ala Glu Leu Gln Leu Thr
 65 70 75 80

Thr Phe Thr Pro Leu Ile Gln Tyr Gly Cys Ser Ser Gln Leu Gln Phe
 85 90 95

Phe Leu Cys Ser Val Tyr Val Pro Met Cys Thr Glu Lys Ile Asn Ile
 100 105 110

Pro Ile Gly Pro Cys Gly Gly Met Cys Leu Ser Val Lys Arg Arg Cys
 115 120 125

Glu Pro Val Leu Lys Glu Phe Gly Phe Ala Trp Pro Glu Ser Leu Asn
 130 135 140

Cys Ser Lys Phe Pro Pro Gln Asn Asp His Asn His Met Cys Met Glu
 145 150 155 160

Gly Pro Gly Asp Glu Glu Val Pro Leu Pro His Lys Thr Pro Ile Gln
 165 170 175

Pro Gly Glu Glu Cys His Ser Val Gly Thr Asn Ser Asp Gln Tyr Ile
 180 185 190

Trp Val Lys Arg Ser Leu Asn Cys Val Leu Lys Cys Gly Tyr Asp Ala
 195 200 205

Gly Leu Tyr Ser Arg Ser Ala Lys Glu Phe Thr Asp Ile Trp Met Ala
 210 215 220

Val Trp Ala Ser Leu Cys Phe Ile Ser Thr Ala Phe Thr Val Leu Thr
 225 230 235 240

Phe Leu Ile Asp Ser Ser Arg Phe Ser Tyr Pro Glu Arg Pro Ile Ile
 245 250 255

Phe Leu Ser Met Cys Tyr Asn Ile Tyr Ser Ile Ala Tyr Ile Val Arg
 260 265 270

Leu Thr Val Gly Arg Glu Arg Ile Ser Cys Asp Phe Glu Glu Ala Ala
 275 280 285

Glu Pro Val Leu Ile Gln Glu Gly Leu Lys Asn Thr Gly Cys Ala Ile

290

295

300

Ile Phe Leu Leu Met Tyr Phe Phe Gly Met Ala Ser Ser Ile Trp Trp-
 305 310 315 320

Val Ile Leu Thr Leu Thr Trp Phe Leu Ala Ala Gly Leu Lys Trp Gly
 325 330 335

His Glu Ala Ile Glu Met His Ser Ser Tyr Phe His Ile Ala Ala Trp
 340 345 350

Ala Ile Pro Ala Val Lys Thr Ile Val Ile Leu Ile Met Arg Leu Val
 355 360 365

Asp Ala Asp Glu Leu Thr Gly Leu Cys Tyr Val Gly Asn Gln Asn Leu
 370 375 380

Asp Ala Leu Thr Gly Phe Val Val Ala Pro Leu Phe Thr Tyr Leu Val
 385 390 395 400

Ile Gly Thr Leu Phe Ile Ala Ala Gly Leu Val Ala Leu Phe Lys Ile
 405 410 415

Arg Ser Asn Leu Gln Lys Asp Gly Thr Lys Thr Asp Lys Leu Glu Arg
 420 425 430

Leu Met Val Lys Ile Gly Val Phe Ser Val Leu Tyr Thr Val Pro Ala
 435 440 445

Thr Cys Val Ile Ala Cys Tyr Phe Tyr Glu Ile Ser Asn Trp Ala Leu
 450 455 460

Phe Arg Tyr Ser Ala Asp Asp Ser Asn Met Ala Val Glu Met Leu Lys
 465 470 475 480

Ile Phe Met Ser Leu Leu Val Gly Ile Thr Ser Gly Met Trp Ile Trp
 485 490 495

Ser Ala Lys Thr Leu His Thr Trp Gln Lys Cys Ser Asn Arg Leu Val
 500 505 510

Asn Ser Gly Lys Val Lys Arg Glu Lys Arg Gly Asn Gly Trp Val Lys
 515 520 525

Pro Gly Lys Gly Ser Glu Thr Val Val
 530 535

<210> 2608
 <211> 362
 <212> PRT
 <213> Homo sapiens

<400> 2608

Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Ser Ala Ala
 1 5 10 15

Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
 20 25 30

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser
 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
 50 55 60

Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
 65 70 75 80

Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln
 85 90 95

Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser
 100 105 110

Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly
 115 120 125

Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly
 130 135 140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala
 145 150 155 160

Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Gly
 165 170 175

Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu
 180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro
 195 200 205

Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr
 210 215 220
 Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr
 225 230 235 240
 Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu
 245 250 255
 Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Trp Ala Ala Val Val
 260 265 270
 Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu
 275 280 285
 Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Ser
 290 295 300
 Thr Val Pro Ile Val Gly Ile Val Ala Gly Leu Ala Val Leu Ala Val
 305 310 315 320
 Val Val Ile Gly Ala Val Val Ala Ala Val Met Cys Arg Arg Lys Ser
 325 330 335
 Ser Gly Gly Lys Gly Gly Ser Tyr Ser Gln Ala Ala Cys Ser Asp Ser
 340 345 350
 Ala Gln Gly Ser Asp Val Ser Leu Thr Ala
 355 360
 <210> 2609
 <211> 350
 <212> PRT
 <213> Homo sapiens
 <400> 2609
 Met Glu Thr Asn Ser Ser Leu Pro Thr Asn Ile Ser Gly Gly Thr Pro
 1 5 10 15
 Ala Val Ser Ala Gly Tyr Leu Phe Leu Asp Ile Ile Thr Tyr Leu Val
 20 25 30
 Phe Ala Val Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile
 35 40 45
 Trp Val Ala Gly Phe Arg Met Thr His Thr Val Thr Thr Ile Ser Tyr
 50 55 60

Leu Asn Leu Ala Val Ala Asp Phe Cys Phe Thr Ser Thr Leu Pro Phe
 65 70 75 80

Phe Met Val Arg Lys Ala Met Gly Gly His Trp Pro Phe Gly Trp Phe
 85 90 95

Leu Cys Lys Phe Val Phe Thr Ile Val Asp Ile Asn Leu Phe Gly Ser
 100 105 110

Val Phe Leu Ile Ala Leu Ile Ala Leu Asp Arg Cys Val Cys Val Leu
 115 120 125

His Pro Val Trp Thr Gln Asn His Arg Thr Val Ser Leu Ala Lys Lys
 130 135 140

Val Ile Ile Gly Pro Trp Val Met Ala Leu Leu Thr Leu Pro Val
 145 150 155 160

Ile Ile Arg Val Thr Thr Val Pro Gly Lys Thr Gly Thr Val Ala Cys
 165 170 175

Thr Phe Asn Phe Ser Pro Trp Thr Asn Asp Pro Lys Glu Arg Ile Asn
 180 185 190

Val Ala Val Ala Met Leu Thr Val Arg Gly Ile Ile Arg Phe Ile Ile
 195 200 205

Gly Phe Ser Ala Pro Met Ser Ile Val Ala Val Ser Tyr Gly Leu Ile
 210 215 220

Ala Thr Lys Ile His Lys Gln Gly Leu Ile Lys Ser Ser Arg Pro Leu
 225 230 235 240

Arg Val Leu Ser Phe Val Ala Ala Ala Phe Phe Leu Cys Trp Ser Pro
 245 250 255

Tyr Gln Val Val Ala Leu Ile Ala Thr Val Arg Ile Arg Glu Leu Leu
 260 265 270

Gln Gly Met Tyr Lys Glu Ile Gly Ile Ala Val Asp Val Thr Ser Ala
 275 280 285

Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe Met
 290 295 300

Gly Gln Asp Phe Arg Glu Arg Leu Ile His Ala Leu Pro Ala Ser Leu
 305 310 315 320

Glu Arg Ala Leu Thr Glu Asp Ser Thr Gln Thr Ser Asp Thr Ala Thr
 325 330 335

Asn Ser Thr Leu Pro Ser Ala Glu Val Glu Leu Gln Ala Lys
 340 345 350

<210> 2610

<211> 638

<212> PRT

<213> Homo sapiens

<400> 2610

Met Ser Ala Ser Ser Ser Gly Gly Ser Pro Arg Phe Pro Ser Cys Gly
 1 5 10 15

Lys Asn Gly Val Thr Ser Leu Thr Gln Lys Lys Val Leu Arg Ala Pro
 20 25 30

Cys Gly Ala Pro Ser Val Thr Val Thr Lys Ser His Lys Arg Gly Met
 35 40 45

Lys Gly Asp Thr Val Asn Val Arg Arg Ser Val Arg Val Lys Thr Lys
 50 55 60

Asn Pro Pro His Cys Leu Glu Ile Thr Pro Pro Ser Ser Glu Lys Leu
 65 70 75 80

Val Ser Val Met Arg Leu Ser Asp Leu Ser Thr Glu Asp Asp Asp Ser
 85 90 95

Gly His Cys Lys Met Asn Arg Tyr Asp Lys Lys Ile Asp Ser Leu Met
 100 105 110

Asn Ala Val Gly Cys Leu Lys Ser Glu Val Lys Met Gln Lys Gly Glu
 115 120 125

Arg Gln Met Ala Lys Arg Phe Leu Glu Glu Arg Lys Glu Glu Leu Glu
 130 135 140

Glu Val Ala His Glu Leu Ala Glu Thr Glu His Glu Asn Thr Val Leu
 145 150 155 160

Arg His Asn Ile Glu Arg Met Lys Glu Glu Lys Asp Phe Thr Ile Leu

165	170	175
Gln Lys Lys His Leu Gln Gln Glu Lys Glu Cys Leu Met Ser Lys Leu 180 185 190		
Val Glu Ala Glu Met Asp Gly Ala Ala Ala Ala Lys Gln Val Met Ala 195 200 205		
Leu Lys Asp Thr Ile Gly Lys Leu Lys Thr Glu Lys Gln Met Thr Cys 210 215 220		
Thr Asp Ile Asn Thr Leu Thr Arg Gln Lys Glu Leu Leu Leu Gln Lys 225 230 235 240		
Leu Ser Thr Phe Glu Glu Thr Asn Arg Thr Leu Arg Asp Leu Leu Arg 245 250 255		
Glu Gln His Cys Lys Glu Asp Ser Glu Arg Leu Met Glu Gln Gln Gly 260 265 270		
Ala Leu Leu Lys Arg Leu Ala Glu Ala Asp Ser Glu Lys Ala Arg Leu 275 280 285		
Leu Leu Leu Leu Gln Asp Lys Asp Lys Glu Val Glu Glu Leu Leu Gln 290 295 300		
Glu Ile Gln Cys Glu Lys Ala Gln Ala Lys Thr Ala Ser Glu Leu Ser 305 310 315 320		
Lys Ser Met Glu Ser Met Arg Gly His Leu Gln Ala Gln Leu Arg Ser 325 330 335		
Lys Glu Ala Glu Asn Ser Arg Leu Cys Met Gln Ile Lys Asn Leu Glu 340 345 350		
Arg Ser Gly Asn Gln His Lys Ala Glu Val Glu Ala Ile Met Glu Gln 355 360 365		
Leu Lys Glu Leu Lys Gln Lys Gly Asp Arg Asp Lys Glu Ser Leu Lys 370 375 380		
Lys Ala Ile Arg Ala Gln Lys Glu Arg Ala Glu Lys Ser Glu Glu Tyr 385 390 395 400		
Ala Glu Gln Leu His Val Gln Leu Ala Asp Lys Asp Leu Tyr Val Ala 405 410 415		

Glu Ala Leu Ser Thr Leu Glu Ser Trp Arg Ser Arg Tyr Asn Gln Val
 420 425 430

Val Lys Glu Lys Gly Asp Leu Glu Leu Glu Ile Ile Val Leu Asn Asp
 435 440 445

Arg Val Thr Asp Leu Val Asn Gln Gln Gln Thr Leu Glu Glu Lys Met
 450 455 460

Arg Glu Asp Arg Asp Ser Leu Val Glu Arg Leu His Arg Gln Thr Ala
 465 470 475 480

Glu Tyr Ser Ala Phe Lys Leu Glu Asn Glu Arg Leu Lys Ala Ser Phe
 485 490 495

Ala Pro Met Glu Asp Lys Leu Asn Gln Ala His Leu Glu Val Gln Gln
 500 505 510

Leu Lys Ala Ser Val Lys Asn Tyr Glu Gly Met Ile Asp Asn Tyr Lys
 515 520 525

Ser Gln Val Met Lys Thr Arg Leu Glu Ala Asp Glu Val Ala Ala Gln
 530 535 540

Leu Glu Arg Cys Asp Lys Glu Asn Lys Ile Leu Lys Asp Glu Met Asn
 545 550 555 560

Lys Glu Ile Glu Ala Ala Arg Arg Gln Phe Gln Ser Gln Leu Ala Asp
 565 570 575

Leu Gln Gln Leu Pro Asp Ile Leu Lys Ile Thr Glu Ala Lys Leu Ala
 580 585 590

Glu Cys Gln Asp Gln Leu Gln Gly Tyr Glu Arg Lys Asn Ile Asp Leu
 595 600 605

Thr Ala Ile Ile Ser Asp Leu Arg Ser Arg Val Arg Asp Trp Gln Lys
 610 615 620

Gly Ser His Glu Leu Thr Arg Ala Gly Ala Arg Ile Pro Arg
 625 630 635

<210> 2611

<211> 197

<212> PRT

<213> Homo sapiens

<400> 2611

Met Thr Leu Leu Pro Gly Leu Leu Phe Leu Thr Trp Leu His Thr Cys
 1 5 10 15

Leu Ala His His Asp Pro Ser Leu Arg Gly His Pro His Ser His Gly
 20 25 30

Thr Pro His Cys Tyr Ser Ala Glu Glu Leu Pro Leu Gly Gln Ala Pro
 35 40 45

Pro His Leu Leu Ala Arg Gly Ala Lys Trp Gly Gln Ala Leu Pro Val
 50 55 60

Ala Leu Val Ser Ser Leu Glu Ala Ala Ser His Arg Gly Arg His Glu
 65 70 75 80

Arg Pro Ser Ala Thr Thr Gln Cys Pro Val Leu Arg Pro Glu Glu Val
 85 90 95

Leu Glu Ala Asp Thr His Gln Arg Ser Ile Ser Pro Trp Arg Tyr Arg
 100 105 110

Val Asp Thr Asp Glu Asp Arg Tyr Pro Gln Lys Leu Ala Phe Ala Glu
 115 120 125

Cys Leu Cys Arg Gly Cys Ile Asp Ala Arg Thr Gly Arg Glu Thr Ala
 130 135 140

Ala Leu Asn Ser Val Arg Leu Leu Gln Ser Leu Leu Val Leu Arg Arg
 145 150 155 160

Arg Pro Cys Ser Arg Asp Gly Ser Gly Leu Pro Thr Pro Gly Ala Phe
 165 170 175

Ala Phe His Thr Glu Phe Ile His Val Pro Val Gly Cys Thr Cys Val
 180 185 190

Leu Pro Arg Ser Val
 195

<210> 2612

<211> 570

<212> PRT

<213> Homo sapiens

<400> 2612

Met Asn Val Val Phe Ala Val Lys Gln Tyr Ile Ser Lys Met Ile Glu
1 5 10 15

Asp Ser Gly Pro Gly Met Lys Val Leu Leu Met Asp Lys Glu Thr Thr
20 25 30

Gly Ile Val Ser Met Val Tyr Thr Gln Ser Glu Ile Leu Gln Lys Glu
35 40 45

Val Tyr Leu Phe Glu Arg Ile Asp Ser Gln Asn Arg Glu Ile Met Lys
50 55 60

His Leu Lys Ala Ile Cys Phe Leu Arg Pro Thr Lys Glu Asn Val Asp
65 70 75 80

Tyr Ile Ile Gln Glu Leu Arg Arg Pro Lys Tyr Thr Ile Tyr Phe Ile
85 90 95

Tyr Phe Ser Asn Val Ile Ser Lys Ser Asp Val Lys Ser Leu Ala Glu
100 105 110

Ala Asp Glu Gln Glu Val Val Ala Glu Val Gln Glu Phe Tyr Gly Asp
115 120 125

Tyr Ile Ala Val Asn Pro His Leu Phe Ser Leu Asn Ile Leu Gly Cys
130 135 140

Cys Gln Gly Arg Asn Trp Asp Pro Ala Gln Leu Ser Arg Thr Thr Gln
145 150 155 160

Gly Leu Thr Ala Leu Leu Leu Ser Leu Lys Lys Cys Pro Met Ile Arg
165 170 175

Tyr Gln Leu Ser Ser Glu Ala Ala Lys Arg Leu Ala Glu Cys Val Lys
180 185 190

Gln Val Ile Thr Lys Glu Tyr Glu Leu Phe Glu Phe Arg Arg Thr Glu
195 200 205

Val Pro Pro Leu Leu Leu Ile Leu Asp Arg Cys Asp Asp Ala Ile Thr
210 215 220

Pro Leu Leu Asn Gln Trp Thr Tyr Gln Ala Met Val His Glu Leu Leu
225 230 235 240

Gly	Ile	Asn	Asn	Asn	Arg	Ile	Asp	Leu	Ser	Arg	Val	Pro	Gly	Ile	Ser	245	250	255
Lys	Asp	Leu	Arg	Glu	Val	Val	Leu	Ser	Ala	Glu	Asn	Asp	Glu	Phe	Tyr	260	265	270
Ala	Asn	Asn	Met	Tyr	Leu	Asn	Phe	Ala	Glu	Ile	Gly	Ser	Asn	Ile	Lys	275	280	285
Asn	Leu	Met	Glu	Asp	Phe	Gln	Lys	Lys	Lys	Pro	Lys	Glu	Gln	Gln	Lys	290	295	300
Leu	Glu	Ser	Ile	Ala	Asp	Met	Lys	Ala	Phe	Val	Glu	Asn	Tyr	Pro	Gln	305	310	320
Phe	Lys	Lys	Met	Ser	Gly	Thr	Val	Ser	Lys	His	Val	Thr	Val	Val	Gly	325	330	335
Glu	Leu	Ser	Arg	Leu	Val	Ser	Glu	Arg	Asn	Leu	Leu	Glu	Val	Ser	Glu	340	345	350
Val	Glu	Gln	Glu	Leu	Ala	Cys	Gln	Asn	Asp	His	Ser	Ser	Ala	Leu	Gln	355	360	365
Asn	Ile	Lys	Arg	Leu	Leu	Gln	Asn	Pro	Lys	Val	Thr	Glu	Phe	Asp	Ala	370	375	380
Ala	Arg	Leu	Val	Met	Leu	Tyr	Ala	Leu	His	Tyr	Glu	Arg	His	Ser	Ser	385	390	400
Asn	Ser	Leu	Pro	Gly	Leu	Met	Met	Asp	Leu	Arg	Asn	Lys	Gly	Val	Ser	405	410	415
Glu	Lys	Tyr	Arg	Lys	Leu	Val	Ser	Ala	Val	Val	Glu	Tyr	Gly	Gly	Lys	420	425	430
Arg	Val	Arg	Gly	Ser	Asp	Leu	Phe	Ser	Pro	Lys	Asp	Ala	Val	Ala	Ile	435	440	445
Thr	Lys	Gln	Phe	Leu	Lys	Gly	Leu	Lys	Gly	Val	Glu	Asn	Val	Tyr	Thr	450	455	460
Gln	His	Gln	Pro	Phe	Leu	His	Glu	Thr	Leu	Asp	His	Leu	Ile	Lys	Gly	465	470	475

Arg Leu Lys Glu Asn Leu Tyr Pro Tyr Leu Gly Pro Ser Thr Leu Arg
485 490 495

Asp Arg Pro Gln Asp Ile Ile Val Phe Val Ile Gly Gly Ala Thr Tyr
500 505 510

Glu Glu Ala Leu Thr Val Tyr Asn Leu Asn Arg Thr Thr Pro Gly Val
515 520 525

Arg Ile Val Leu Gly Gly Thr Thr Val His Asn Thr Lys Ser Phe Leu
530 535 540

Glu Glu Val Leu Ala Ser Gly Leu His Ser Arg Ser Lys Glu Ser Ser
545 550 555 560

Gln Val Thr Ser Arg Ser Ala Ser Arg Arg
565 570

<210> 2613

<211> 474

<212> PRT

<213> Homo sapiens

<400> 2613

Met Thr Ile Leu Thr Tyr Pro Phe Lys Asn Leu Pro Thr Ala Ser Lys
1 5 10 15

Trp Ala Leu Arg Phe Ser Ile Arg Pro Leu Ser Cys Ser Ser Gln Leu
20 25 30

Arg Ala Ala Pro Ala Val Gln Thr Lys Thr Lys Lys Thr Leu Ala Lys
35 40 45

Pro Asn Ile Arg Asn Val Val Val Val Asp Gly Val Arg Thr Pro Phe
50 55 60

Leu Leu Ser Gly Thr Ser Tyr Lys Asp Leu Met Pro His Asp Leu Ala
65 70 75 80

Arg Ala Ala Leu Thr Gly Leu Leu His Arg Thr Ser Val Pro Lys Glu
85 90 95

Val Val Asp Tyr Ile Ile Phe Gly Thr Val Ile Gln Glu Val Lys Thr
100 105 110

Ser Asn Val Ala Arg Glu Ala Ala Leu Gly Ala Gly Phe Ser Asp Lys
115 120 125

Thr Pro Ala His Thr Val Thr Met Ala Cys Ile Ser Ala Asn Gln Ala
130 135 140

Met Thr Thr Gly Val Gly Leu Ile Ala Ser Gly Gln Cys Asp Val Ile
145 150 155 160

Val Ala Gly Gly Val Glu Leu Met Ser Asp Val Pro Ile Arg His Ser
165 170 175

Arg Lys Met Arg Lys Leu Met Leu Asp Leu Asn Lys Ala Lys Ser Met
180 185 190

Gly Gln Arg Leu Ser Leu Ile Ser Lys Phe Arg Phe Asn Phe Leu Ala
195 200 205

Pro Glu Leu Pro Ala Val Ser Glu Phe Ser Thr Ser Glu Thr Met Gly
210 215 220

His Ser Ala Asp Arg Leu Ala Ala Ala Phe Ala Val Ser Arg Leu Glu
225 230 235 240

Gln Asp Glu Tyr Ala Leu Arg Ser His Ser Leu Ala Lys Lys Ala Gln
245 250 255

Asp Glu Gly Leu Leu Ser Asp Val Val Pro Phe Lys Val Pro Gly Lys
260 265 270

Asp Thr Val Thr Lys Asp Asn Gly Ile Arg Pro Ser Ser Leu Glu Gln
275 280 285

Met Ala Lys Leu Lys Pro Ala Phe Ile Lys Pro Tyr Gly Thr Val Thr
290 295 300

Ala Ala Asn Ser Ser Phe Leu Thr Asp Gly Ala Ser Ala Met Leu Ile
305 310 315 320

Met Ala Glu Glu Lys Ala Leu Ala Met Gly Tyr Lys Pro Lys Ala Tyr
325 330 335

Leu Arg Asp Phe Met Tyr Val Ser Gln Asp Pro Lys Asp Gln Leu Leu
340 345 350

Leu Gly Pro Thr Tyr Ala Thr Pro Lys Val Leu Glu Lys Ala Gly Leu
355 360 365

Thr Met Asn Asp Ile Asp Ala Phe Glu Phe His Glu Ala Phe Ser Gly
 370 375 380

Gln Ile Leu Ala Asn Phe Lys Ala Met Asp Ser Asp Trp Phe Ala Glu
 385 390 395 400

Asn Tyr Met Gly Arg Lys Thr Lys Val Gly Leu Pro Pro Leu Glu Lys
 405 410 415

Phe Asn Asn Trp Gly Gly Ser Leu Ser Leu Gly His Pro Phe Gly Ala
 420 425 430

Thr Gly Cys Arg Leu Val Met Ala Ala Ala Asn Arg Leu Arg Lys Glu
 435 440 445

Gly Gly Gln Tyr Gly Leu Val Ala Ala Cys Ala Ala Gly Gly Gln Gly
 450 455 460

His Ala Met Ile Val Glu Ala Tyr Pro Lys
 465 470

<210> 2614

<211> 793

<212> PRT

<213> Homo sapiens

<400> 2614

Met Glu Ser Arg Ala Glu Gly Gly Ser Pro Ala Val Phe Asp Trp Phe
 1 5 10 15

Phe Glu Ala Ala Cys Pro Ala Ser Leu Gln Glu Asp Pro Pro Ile Leu
 20 25 30

Arg Gln Phe Pro Pro Asp Phe Arg Asp Gln Glu Ala Met Gln Met Val
 35 40 45

Pro Lys Phe Cys Phe Pro Phe Asp Val Glu Arg Glu Pro Pro Ser Pro
 50 55 60

Ala Val Gln His Phe Thr Phe Ala Leu Thr Asp Leu Ala Gly Asn Arg
 65 70 75 80

Arg Phe Gly Phe Cys Arg Leu Arg Ala Gly Thr Gln Ser Cys Leu Cys
 85 90 95

Ile Leu Ser His Leu Pro Trp Phe Glu Val Phe Tyr Lys Leu Leu Asn

100	105	110
Thr Val Gly Asp Leu Leu Ala Gln Asp Gln Val Thr Glu Ala Glu Glu 115 120 125		
Leu Leu Gln Asn Leu Phe Gln Gln Ser Leu Ser Gly Pro Gln Ala Ser 130 135 140		
Val Gly Leu Glu Leu Gly Ser Gly Val Thr Val Ser Ser Gly Gln Gly 145 150 155 160		
Ile Pro Pro Pro Thr Arg Gly Asn Ser Lys Pro Leu Ser Cys Phe Val 165 170 175		
Ala Pro Asp Ser Gly Arg Leu Pro Ser Ile Pro Glu Asn Arg Asn Leu 180 185 190		
Thr Glu Leu Val Val Ala Val Thr Asp Glu Asn Ile Val Gly Leu Phe 195 200 205		
Ala Ala Leu Leu Ala Glu Arg Arg Val Leu Leu Thr Ala Ser Lys Leu 210 215 220		
Ser Thr Leu Thr Ser Cys Val His Ala Ser Cys Ala Leu Leu Tyr Pro 225 230 235 240		
Met Arg Trp Glu His Val Leu Ile Pro Thr Leu Pro Pro His Leu Leu 245 250 255		
Asp Tyr Cys Cys Ala Pro Met Pro Tyr Leu Ile Gly Val His Ala Ser 260 265 270		
Leu Ala Glu Arg Val Arg Glu Lys Ala Leu Glu Asp Val Val Val Leu 275 280 285		
Asn Val Asp Ala Asn Thr Leu Glu Thr Thr Phe Asn Asp Val Gln Ala 290 295 300		
Leu Pro Pro Asp Val Val Ser Leu Leu Arg Leu Arg Leu Arg Lys Val 305 310 315 320		
Ala Leu Ala Pro Gly Glu Gly Val Ser Arg Leu Phe Leu Lys Ala Gln 325 330 335		
Ala Leu Leu Phe Gly Gly Tyr Arg Asp Ala Leu Val Cys Ser Pro Gly 340 345 350		

Gln Pro Val Thr Phe Ser Glu Glu Val Phe Leu Ala Gln Lys Pro Gly
 355 360 365

Ala Pro Leu Gln Ala Phe His Arg Arg Ala Val His Leu Gln Leu Phe
 370 375 380

Lys Gln Phe Ile Glu Ala Arg Leu Glu Lys Leu Asn Lys Gly Glu Gly
 385 390 395 400

Phe Ser Asp Gln Phe Glu Gln Glu Ile Thr Gly Cys Gly Ala Ser Pro
 405 410 415

Gly Ala Leu Arg Ser Tyr Gln Leu Trp Ala Asp Asn Leu Lys Lys Gly
 420 425 430

Gly Gly Ala Leu Leu His Ser Val Lys Ala Lys Thr Gln Pro Ala Val
 435 440 445

Lys Asn Met Tyr Arg Ser Ala Lys Ser Gly Leu Lys Gly Val Gln Ser
 450 455 460

Leu Leu Met Tyr Lys Asp Gly Asp Ser Val Leu Gln Arg Gly Gly Ser
 465 470 475 480

Leu Arg Ala Pro Ala Leu Pro Ser Arg Ser Asp Arg Leu Gln Gln Arg
 485 490 495

Leu Pro Ile Thr Gln His Phe Gly Lys Asn Arg Pro Leu Arg Pro Ser
 500 505 510

Arg Arg Arg Gln Leu Glu Glu Gly Thr Ser Glu Pro Pro Gly Ala Gly
 515 520 525

Thr Pro Pro Leu Ser Pro Glu Asp Glu Gly Cys Pro Trp Ala Glu Glu
 530 535 540

Ala Leu Asp Ser Ser Phe Leu Gly Ser Gly Glu Glu Leu Asp Leu Leu
 545 550 555 560

Ser Glu Ile Leu Asp Ser Leu Ser Met Gly Ala Lys Ser Ala Gly Ser
 565 570 575

Leu Arg Pro Ser Gln Ser Leu Asp Cys Cys His Arg Gly Asp Leu Asp
 580 585 590

Ser Cys Phe Ser Leu Pro Asn Ile Leu Arg Trp Gln Pro Asp Asp Lys
 595 600 605

Lys Leu Pro Glu Pro Glu Pro Gln Pro Leu Ser Leu Pro Ser Leu Gln
 610 615 620

Asn Ala Ser Ser Leu Asp Ala Thr Ser Ser Ser Lys Asp Ser Arg Ser
 625 630 635 640

Gln Leu Ile Pro Ser Glu Ser Asp Gln Glu Val Thr Ser Pro Ser Gln
 645 650 655

Ser Ser Thr Ala Ser Ala Asp Pro Ser Ile Trp Gly Asp Pro Lys Pro
 660 665 670

Ser Pro Leu Thr Glu Pro Leu Ile Leu His Leu Thr Pro Ser His Lys
 675 680 685

Ala Ala Glu Asp Phe Thr Ala Gln Glu Asn Pro Thr Pro Trp Leu Ser
 690 695 700

Thr Ala Pro Thr Glu Pro Ser Pro Pro Glu Ser Pro Gln Ile Leu Ala
 705 710 715 720

Pro Thr Lys Pro Asn Phe Asp Ile Ala Trp Thr Ser Gln Pro Leu Asp
 725 730 735

Pro Ser Ser Asp Pro Ser Ser Leu Glu Asp Pro Arg Ala Arg Pro Pro
 740 745 750

Lys Ala Leu Leu Ala Glu Arg Ala His Leu Gln Pro Arg Glu Glu Pro
 755 760 765

Gly Ala Leu Asn Ser Pro Ala Thr Pro Thr Ser Asn Cys Gln Lys Ser
 770 775 780

Gln Pro Ser Lys Pro Ala Gln Ser Arg
 785 790

<210> 2615
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 2615

Met Ser Phe Phe Gln Leu Leu Met Lys Arg Lys Glu Leu Ile Pro Leu

1 5 10 15

Val Val Phe Met Thr Val Ala Ala Gly Gly Ala Ser Ser Phe Ala Val
20 25 30

Tyr Ser Leu Trp Lys Thr Asp Val Ile Leu Asp Arg Lys Lys Asn Pro
35 40 45

Glu Pro Trp Glu Thr Val Asp Pro Thr Val Pro Gln Lys Leu Ile Thr
50 55 60

Ile Asn Gln Gln Trp Lys Pro Ile Glu Glu Leu Gln Asn Val Gln Arg
65 70 75 80

Val Thr Lys

<210> 2616

<211> 2413

<212> PRT

<213> Homo sapiens

<400> 2616

Met Gly Ile Ser Thr Val Ile Leu Glu Met Cys Leu Leu Trp Gly Gln
1 5 10 15

Val Leu Ser Thr Gly Gly Trp Ile Pro Arg Thr Thr Asp Tyr Ala Ser
20 25 30

Leu Ile Pro Ser Glu Val Pro Leu Asp Gln Thr Val Ala Glu Gly Ser
35 40 45

Pro Phe Pro Ser Glu Ser Thr Leu Glu Ser Thr Ala Ala Glu Gly Ser
50 55 60

Pro Ile Ser Leu Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
65 70 75 80

Leu Ile Pro Ser Glu Ser Thr Leu Glu Ser Thr Val Ala Glu Gly Ser
85 90 95

Asp Ser Gly Leu Ala Leu Arg Leu Val Asn Gly Asp Gly Arg Cys Gln
100 105 110

Gly Arg Val Glu Ile Leu Tyr Arg Gly Ser Trp Gly Thr Val Cys Asp
115 120 125

Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg Gln Leu Gly
 130 135 140

Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Trp Phe Gly Gln Gly
 145 150 155 160

Ser Gly Pro Ile Ala Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser
 165 170 175

Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 180 185 190

His Gly Glu Asp Ala Gly Val Ile Cys Ser Ala Ala Gln Pro Gln Ser
 195 200 205

Thr Leu Arg Pro Glu Ser Trp Pro Val Arg Ile Ser Pro Pro Val Pro
 210 215 220

Thr Glu Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 225 230 235 240

Asp Arg Cys Arg Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly
 245 250 255

Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys
 260 265 270

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln
 275 280 285

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
 290 295 300

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Thr
 305 310 315 320

His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Pro
 325 330 335

Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His Ala
 340 345 350

Ser Thr Ala Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly
 355 360 365

Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp
 370 375 380

Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala Asn Val Val
 385 390 395 400

Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro Gly Asn Ala
 405 410 415

Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys
 420 425 430

Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu
 435 440 445

Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala
 450 455 460

Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro Thr Ile Thr
 465 470 475 480

Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
 485 490 495

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 500 505 510

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala
 515 520 525

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Leu Ala Pro
 530 535 540

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 545 550 555 560

Val Arg Cys Ser Gly Asn Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
 565 570 575

Gly Trp Leu Ser His Asn Cys Gly His Ser Glu Asp Ala Gly Val Ile
 580 585 590

Cys Ser Gly Pro Glu Ser Ser Leu Ala Leu Arg Leu Val Asn Gly Gly
 595 600 605

Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly Ser Trp Gly

610

615

620

Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn Val Val Cys
 625 630 635 640

Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Arg
 645 650 655

Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val Arg Cys Ser
 660 665 670

Gly His Glu Ser Tyr Leu Trp Ser Cys Pro Asn Asn Gly Trp Leu Ser
 675 680 685

His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ala
 690 695 700

Gln Ser Arg Ser Thr Pro Arg Pro Asp Thr Leu Ser Thr Ile Thr Leu
 705 710 715 720

Pro Pro Ser Thr Val Gly Ser Glu Ser Ser Leu Thr Leu Arg Leu Val
 725 730 735

Asn Gly Ser Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg Gly
 740 745 750

Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Asn Asp Ala Asn
 755 760 765

Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly
 770 775 780

Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp Val
 785 790 795 800

Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly
 805 810 815

Trp Leu Ser His Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys
 820 825 830

Ser Val Ser Gln Ser Arg Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr
 835 840 845

Ser His Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu
 850 855 860

Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 865 870 875 880

Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Thr Ser Asp Ala
 885 890 895

Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser Ala Pro
 900 905 910

Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val Leu Asp Asp
 915 920 925

Val Arg Cys Ser Gly Tyr Glu Ser Tyr Leu Trp Ser Cys Pro His Asn
 930 935 940

Gly Trp Leu Ser His Asn Cys Gln His Ser Glu Asp Ala Gly Val Ile
 945 950 955 960

Cys Ser Ala Ala His Ser Trp Ser Thr Pro Ser Pro Asp Thr Leu Pro
 965 970 975

Thr Ile Thr Leu Pro Ala Ser Thr Val Gly Ser Glu Ser Ser Leu Ala
 980 985 990

Leu Arg Leu Val Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val
 995 1000 1005

Leu Tyr Gln Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp
 1010 1015 1020

Thr Asn Asp Ala Asn Val Val Cys Arg Gln Pro Gly Cys Gly Trp
 1025 1030 1035

Ala Met Ser Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly
 1040 1045 1050

Pro Ile Val Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr
 1055 1060 1065

Pro Trp Ser Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly
 1070 1075 1080

His Ser Glu Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Arg
 1085 1090 1095

Pro Thr 1100	Pro Ser Pro Asp Thr 1105	Trp Pro Thr Ser His 1110	Ala Ser Thr
Ala Gly 1115	Ser Glu Ser Ser Leu 1120	Ala Leu Arg Leu Val 1125	Asn Gly Gly
Asp Arg 1130	Cys Gln Gly Arg Val 1135	Glu Val Leu Tyr Arg 1140	Gly Ser Trp
Gly Thr 1145	Val Cys Asp Asp Tyr 1150	Trp Asp Thr Asn Asp 1155	Ala Asn Val
Val Cys 1160	Arg Gln Leu Gly Cys 1165	Gly Trp Ala Met Ser 1170	Ala Pro Gly
Asn Ala 1175	Arg Phe Gly Gln Gly 1180	Ser Gly Pro Ile Val 1185	Leu Asp Asp
Val Arg 1190	Cys Ser Gly His Glu 1195	Ser Tyr Leu Trp Ser 1200	Cys Pro His
Asn Gly 1205	Trp Leu Ser His Asn 1210	Cys Gly His His Glu 1215	Asp Ala Gly
Val Ile 1220	Cys Ser Ala Ser Gln 1225	Ser Gln Pro Thr Pro 1230	Ser Pro Asp
Thr Trp 1235	Pro Thr Ser His Ala 1240	Ser Thr Ala Gly Ser 1245	Glu Ser Ser
Leu Ala 1250	Leu Arg Leu Val Asn 1255	Gly Gly Asp Arg Cys 1260	Gln Gly Arg
Val Glu 1265	Val Leu Tyr Arg Gly 1270	Ser Trp Gly Thr Val 1275	Cys Asp Asp
Tyr Trp 1280	Asp Thr Asn Asp Ala 1285	Asn Val Val Cys Arg 1290	Gln Leu Gly
Cys Gly 1295	Trp Ala Thr Ser Ala 1300	Pro Gly Asn Ala Arg 1305	Phe Gly Gln
Gly Ser 1310	Gly Pro Ile Val Leu 1315	Asp Asp Val Arg Cys 1320	Ser Gly His

Glu Ser Tyr Leu Trp Ser Cys Pro His Asn Gly Trp Leu Ser His
 1325 1330 1335
 Asn Cys Gly His His Glu Asp Ala Gly Val Ile Cys Ser Ala Ser
 1340 1345 1350
 Gln Ser Gln Pro Thr Pro Ser Pro Asp Thr Trp Pro Thr Ser His
 1355 1360 1365
 Ala Ser Thr Ala Gly Ser Glu Ser Ser Leu Ala Leu Arg Leu Val
 1370 1375 1380
 Asn Gly Gly Asp Arg Cys Gln Gly Arg Val Glu Val Leu Tyr Arg
 1385 1390 1395
 Gly Ser Trp Gly Thr Val Cys Asp Asp Tyr Trp Asp Thr Asn Asp
 1400 1405 1410
 Ala Asn Val Val Cys Arg Gln Leu Gly Cys Gly Trp Ala Thr Ser
 1415 1420 1425
 Ala Pro Gly Asn Ala Arg Phe Gly Gln Gly Ser Gly Pro Ile Val
 1430 1435 1440
 Leu Asp Asp Val Arg Cys Ser Gly His Glu Ser Tyr Leu Trp Ser
 1445 1450 1455
 Cys Pro His Asn Gly Trp Leu Ser His Asn Cys Gly His His Glu
 1460 1465 1470
 Asp Ala Gly Val Ile Cys Ser Ala Ser Gln Ser Gln Pro Thr Pro
 1475 1480 1485
 Ser Pro Asp Thr Trp Pro Thr Ser Arg Ala Ser Thr Ala Gly Ser
 1490 1495 1500
 Glu Ser Thr Leu Ala Leu Arg Leu Val Asn Gly Gly Asp Arg Cys
 1505 1510 1515
 Arg Gly Arg Val Glu Val Leu Tyr Gln Gly Ser Trp Gly Thr Val
 1520 1525 1530
 Cys Asp Asp Tyr Trp Asp Thr Asn Asp Ala Asn Val Val Cys Arg
 1535 1540 1545
 Gln Leu Gly Cys Gly Trp Ala Met Ser Ala Pro Gly Asn Ala Gln

1550		1555		1560	
Phe Gly Gln Gly Ser Gly	Pro Ile Val Leu Asp	Asp Val Arg Cys			
1565	1570	1575			
Ser Gly His Glu Ser Tyr	Leu Trp Ser Cys Pro	His Asn Gly Trp			
1580	1585	1590			
Leu Ser His Asn Cys Gly	His His Glu Asp Ala	Gly Val Ile Cys			
1595	1600	1605			
Ser Ala Ala Gln Ser Gln	Ser Thr Pro Arg Pro	Asp Thr Trp Leu			
1610	1615	1620			
Thr Thr Asn Leu Pro Ala	Leu Thr Val Gly Ser	Glu Ser Ser Leu			
1625	1630	1635			
Ala Leu Arg Leu Val Asn	Gly Gly Asp Arg Cys	Arg Gly Arg Val			
1640	1645	1650			
Glu Val Leu Tyr Arg Gly	Ser Trp Gly Thr Val	Cys Asp Asp Ser			
1655	1660	1665			
Trp Asp Thr Asn Asp Ala	Asn Val Val Cys Arg	Gln Leu Gly Cys			
1670	1675	1680			
Gly Trp Ala Met Ser Ala	Pro Gly Asn Ala Arg	Phe Gly Gln Gly			
1685	1690	1695			
Ser Gly Pro Ile Val Leu	Asp Asp Val Arg Cys	Ser Gly Asn Glu			
1700	1705	1710			
Ser Tyr Leu Trp Ser Cys	Pro His Lys Gly Trp	Leu Thr His Asn			
1715	1720	1725			
Cys Gly His His Glu Asp	Ala Gly Val Ile Cys	Ser Ala Thr Gln			
1730	1735	1740			
Ile Asn Ser Thr Thr Thr	Asp Trp Trp His Pro	Thr Thr Thr Thr			
1745	1750	1755			
Thr Ala Arg Pro Ser Ser	Asn Cys Gly Gly Phe	Leu Phe Tyr Ala			
1760	1765	1770			
Ser Gly Thr Phe Ser Ser	Pro Ser Tyr Pro Ala	Tyr Tyr Pro Asn			
1775	1780	1785			

Asn Ala Lys Cys Val Trp Glu Ile Glu Val Asn Ser Gly Tyr Arg
 1790 1795 1800

Ile Asn Leu Gly Phe Ser Asn Leu Lys Leu Glu Ala His His Asn
 1805 1810 1815

Cys Ser Phe Asp Tyr Val Glu Ile Phe Asp Gly Ser Leu Asn Ser
 1820 1825 1830

Ser Leu Leu Leu Gly Lys Ile Cys Asn Asp Thr Arg Gln Ile Phe
 1835 1840 1845

Thr Ser Ser Tyr Asn Arg Met Thr Ile His Phe Arg Ser Asp Ile
 1850 1855 1860

Ser Phe Gln Asn Thr Gly Phe Leu Ala Trp Tyr Asn Ser Phe Pro
 1865 1870 1875

Ser Asp Ala Thr Leu Arg Leu Val Asn Leu Asn Ser Ser Tyr Gly
 1880 1885 1890

Leu Cys Ala Gly Arg Val Glu Ile Tyr His Gly Gly Thr Trp Gly
 1895 1900 1905

Thr Val Cys Asp Asp Ser Trp Thr Ile Gln Glu Ala Glu Val Val
 1910 1915 1920

Cys Arg Gln Leu Gly Cys Gly Arg Ala Val Ser Ala Leu Gly Asn
 1925 1930 1935

Ala Tyr Phe Gly Ser Gly Ser Gly Pro Ile Thr Leu Asp Asp Val
 1940 1945 1950

Glu Cys Ser Gly Thr Glu Ser Thr Leu Trp Gln Cys Arg Asn Arg
 1955 1960 1965

Gly Trp Phe Ser His Asn Cys Asn His Arg Glu Asp Ala Gly Val
 1970 1975 1980

Ile Cys Ser Gly Asn His Leu Ser Thr Pro Ala Pro Phe Leu Asn
 1985 1990 1995

Ile Thr Arg Pro Asn Thr Asp Tyr Ser Cys Gly Gly Phe Leu Ser
 2000 2005 2010

Gln Pro Ser Gly Asp Phe Ser Ser Pro Phe Tyr Pro Gly Asn Tyr
 2015 2020 2025

Pro Asn Asn Ala Lys Cys Val Trp Asp Ile Glu Val Gln Asn Asn
 2030 2035 2040

Tyr Arg Val Thr Val Ile Phe Arg Asp Val Gln Leu Glu Gly Gly
 2045 2050 2055

Cys Asn Tyr Asp Tyr Ile Glu Val Phe Asp Gly Pro Tyr Arg Ser
 2060 2065 2070

Ser Pro Leu Ile Ala Arg Val Cys Asp Gly Ala Arg Gly Ser Phe
 2075 2080 2085

Thr Ser Ser Ser Asn Phe Met Ser Ile Arg Phe Ile Ser Asp His
 2090 2095 2100

Ser Ile Thr Arg Arg Gly Phe Arg Ala Glu Tyr Tyr Ser Ser Pro
 2105 2110 2115

Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His Met Gln
 2120 2125 2130

Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser Ala
 2135 2140 2145

Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg
 2150 2155 2160

Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser
 2165 2170 2175

Gly Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr
 2180 2185 2190

Ser Asn Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg
 2195 2200 2205

Arg Thr Asp Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn
 2210 2215 2220

Thr Trp Val Asp Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val
 2225 2230 2235

Ala Asn Asn Thr Ile Gln Val Glu Glu Val Gln Tyr Gly Asn Phe
2240 2245 2250

Asp Val Asn Ile Ser Phe Tyr Thr Ser Ser Ser Phe Leu Tyr Pro
2255 2260 2265

Val Thr Ser Arg Pro Tyr Tyr Val Asp Leu Asn Gln Asp Leu Tyr
2270 2275 2280

Val Gln Ala Glu Ile Leu His Ser Asp Ala Val Leu Thr Leu Phe
2285 2290 2295

Val Asp Thr Cys Val Ala Ser Pro Tyr Ser Asn Asp Phe Thr Ser
2300 2305 2310

Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys Val Arg Asp Asp Thr
2315 2320 2325

Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile Ala Arg Phe Arg
2330 2335 2340

Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser Val Tyr Leu
2345 2350 2355

Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Ser Ser Arg
2360 2365 2370

Cys Tyr Arg Gly Cys Val Leu Arg Ser Lys Arg Asp Val Gly Ser
2375 2380 2385

Tyr Gln Glu Lys Val Asp Val Val Leu Gly Pro Ile Gln Leu Gln
2390 2395 2400

Thr Pro Pro Arg Arg Glu Glu Glu Pro Arg
2405 2410

<210> 2617

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2617

Met Gly Lys Cys Arg Gly Leu Arg Thr Ala Arg Lys Leu Arg Ser His
1 5 10 15

Arg Arg Asp Gln Lys Trp His Asp Lys Gln Tyr Lys Lys Ala His Leu
20 25 30

Gly Thr Ala Leu Lys Ala Asn Pro Phe Gly Gly Ala Ser His Ala Lys
35 40 45

Gly Ile Val Leu Glu Lys Val Gly Val Glu Ala Lys Gln Pro Asn Ser
50 55 60

Ala Ile Arg Lys Cys Val Arg Val Gln Leu Ile Lys Asn Gly Lys Lys
65 70 75 80

Ile Thr Ala Phe Val Pro Asn Asp Gly Cys Leu Asn Phe Ile Glu Glu
85 90 95

Asn Asp Glu Val Leu Val Ala Gly Phe Gly Arg Lys Gly His Ala Val
100 105 110

Gly Asp Ile Pro Gly Val Arg Phe Lys Val Val Lys Val Ala Asn Val
115 120 125

Ser Leu Leu Ala Leu Tyr Lys Gly Lys Lys Glu Arg Pro Arg Ser
130 135 140

<210> 2618

<211> 272

<212> PRT

<213> Homo sapiens

<400> 2618

Met Glu Glu Glu Ala Ile Ala Ser Leu Pro Gly Glu Glu Thr Glu Asp
1 5 10 15

Met Asp Phe Leu Ser Gly Leu Glu Leu Ala Asp Leu Leu Asp Pro Arg
20 25 30

Gln Pro Asp Trp His Leu Asp Pro Gly Leu Ser Ser Pro Gly Pro Leu
35 40 45

Ser Ser Ser Gly Gly Gly Ser Asp Ser Gly Gly Leu Trp Arg Gly Asp
50 55 60

Asp Asp Asp Glu Ala Ala Ala Ala Glu Met Gln Arg Phe Ser Asp Leu
65 70 75 80

Leu Gln Arg Leu Leu Asn Gly Ile Gly Gly Cys Ser Ser Ser Ser Asp
85 90 95

Ser Gly Ser Ala Glu Lys Arg Arg Arg Lys Ser Pro Gly Gly Gly Gly
 100 105 110

Gly Gly Gly Ser Gly Asn Asp Asn Asn Gln Ala Ala Thr Lys Ser Pro
 115 120 125

Arg Lys Ala Ala Ala Ala Ala Ala Arg Leu Asn Arg Leu Lys Lys Lys
 130 135 140

Glu Tyr Val Met Gly Leu Glu Ser Arg Val Arg Gly Leu Ala Ala Glu
 145 150 155 160

Asn Gln Glu Leu Arg Ala Glu Asn Arg Glu Leu Gly Lys Arg Val Gln
 165 170 175

Ala Leu Gln Glu Glu Ser Arg Tyr Leu Arg Ala Val Leu Ala Asn Glu
 180 185 190

Thr Gly Leu Ala Arg Leu Leu Ser Arg Leu Ser Gly Val Gly Leu Arg
 195 200 205

Leu Thr Thr Ser Leu Phe Arg Asp Ser Pro Ala Gly Asp His Asp Tyr
 210 215 220

Ala Leu Pro Val Gly Lys Gln Lys Gln Asp Leu Leu Glu Glu Asp Asp
 225 230 235 240

Ser Ala Gly Gly Val Cys Leu His Val Asp Lys Asp Lys Val Ser Val
 245 250 255

Glu Phe Cys Ser Ala Cys Ala Arg Lys Ala Ser Ser Ser Leu Lys Met
 260 265 270

<210> 2619
 <211> 694
 <212> PRT
 <213> Homo sapiens

<400> 2619

Met Lys His Leu Lys Arg Trp Trp Ser Ala Gly Gly Gly Leu Leu His
 1 5 10 15

Leu Thr Leu Leu Leu Ser Leu Ala Gly Leu Arg Val Asp Leu Asp Leu
 20 25 30

Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe
 35 40 45

Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
 50 55 60

Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
 65 70 75 80

Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg
 85 90 95

Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
 100 105 110

Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu
 115 120 125

Gly Ala Ala Ala Ala Ser Ser Thr Gly Gly Ala Gly Ala Ser Val Asp
 130 135 140

Gly Gly Ser Gln Ala Val Gln Gly Gly Gly Gly Asp Pro Arg Ala Ala
 145 150 155 160

Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Glu Lys Ala Pro Ala Glu
 165 170 175

Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn
 180 185 190

Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His
 195 200 205

Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln
 210 215 220

Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
 225 230 235 240

Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr
 245 250 255

Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln
 260 265 270

Pro Glu Asn Ser Leu Glu Gly Ile Ser Leu Gly Asp Ile Pro Leu Pro
 275 280 285

Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn
 290 295 300

Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu
 305 310 315 320

Leu Cys Pro Asn Asn Thr Phe Arg Arg Asp Pro Thr Ala Arg Thr Ser
 325 330 335

Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro
 340 345 350

Glu Gln Thr Leu Pro Gly Thr Asn Leu Thr Gly Phe Leu Ser Pro Val
 355 360 365

Asp Asn His Met Arg Asn Leu Thr Ser Gln Asp Leu Leu Tyr Asp Leu
 370 375 380

Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
 385 390 395 400

Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Pro Asp
 405 410 415

Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
 420 425 430

Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
 435 440 445

Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
 450 455 460

Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
 465 470 475 480

Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
 485 490 495

Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
 500 505 510

Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
 515 520 525

Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
530 535 540

Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
545 550 555 560

Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
565 570 575

Ser Leu Ile Arg Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
580 585 590

Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
595 600 605

Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
610 615 620

Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
625 630 635 640

Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
645 650 655

Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
660 665 670

Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
675 680 685

Gln Lys Gly Lys Arg Lys
690

<210> 2620

<211> 391

<212> PRT

<213> Homo sapiens

<400> 2620

Met Lys Cys Leu Val Thr Gly Gly Asn Val Lys Val Leu Gly Lys Ala
1 5 10 15

Val His Ser Leu Ser Arg Ile Gly Asp Glu Leu Tyr Leu Glu Pro Leu
20 25 30

Glu Asp Gly Leu Ser Leu Arg Thr Val Asn Ser Ser Arg Ser Ala Tyr
35 40 45

Ala Cys Phe Leu Phe Ala Pro Leu Phe Phe Gln Gln Tyr Gln Ala Ala
50 55 60

Thr Pro Gly Gln Asp Leu Leu Arg Cys Lys Ile Leu Met Lys Ser Phe
65 70 75 80

Leu Ser Val Phe Arg Ser Leu Ala Met Leu Glu Lys Thr Val Glu Lys
85 90 95

Cys Cys Ile Ser Leu Asn Gly Arg Ser Ser Arg Leu Val Val Gln Leu
100 105 110

His Cys Lys Phe Gly Val Arg Lys Thr His Asn Leu Ser Phe Gln Asp
115 120 125

Cys Glu Ser Leu Gln Ala Val Phe Asp Pro Ala Ser Cys Pro His Met
130 135 140

Leu Arg Ala Pro Ala Arg Val Leu Gly Glu Ala Val Leu Pro Phe Ser
145 150 155 160

Pro Ala Leu Ala Glu Val Thr Leu Gly Ile Gly Arg Gly Arg Val
165 170 175

Ile Leu Arg Ser Tyr His Glu Glu Glu Ala Asp Ser Thr Ala Lys Ala
180 185 190

Met Val Thr Glu Met Cys Leu Gly Glu Glu Asp Phe Gln Gln Leu Gln
195 200 205

Ala Gln Glu Gly Val Ala Ile Thr Phe Cys Leu Lys Glu Phe Arg Gly
210 215 220

Leu Leu Ser Phe Ala Glu Ser Ala Asn Leu Asn Leu Ser Ile His Phe
225 230 235 240

Asp Ala Pro Gly Arg Pro Ala Ile Phe Thr Ile Lys Asp Ser Leu Leu
245 250 255

Asp Gly His Phe Val Leu Ala Thr Leu Ser Asp Thr Asp Ser His Ser
260 265 270

Gln Asp Leu Gly Ser Pro Glu Arg His Gln Pro Val Pro Gln Leu Gln
275 280 285

Ala His Ser Thr Pro His Pro Asp Asp Phe Ala Asn Asp Asp Ile Asp
290 295 300

Ser Tyr Met Ile Ala Met Glu Thr Thr Ile Gly Asn Glu Gly Ser Arg
305 310 315 320

Val Leu Pro Ser Ile Ser Leu Ser Pro Gly Pro Gln Pro Pro Lys Ser
325 330 335

Pro Gly Pro His Ser Glu Glu Glu Asp Glu Ala Glu Pro Ser Thr Val
340 345 350

Pro Gly Thr Pro Pro Pro Lys Lys Phe Arg Ser Leu Phe Phe Gly Ser
355 360 365

Ile Leu Ala Pro Val Arg Ser Pro Gln Gly Pro Ser Pro Val Leu Ala
370 375 380

Glu Asp Ser Glu Gly Glu Gly
385 390

<210> 2621

<211> 1429

<212> PRT

<213> Homo sapiens

<400> 2621

Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
1 5 10 15

Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
20 25 30

His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
35 40 45

Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
50 55 60

Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
65 70 75 80

Ser Leu Cys Ala Gln Ala Gln Glu Gly Ala Gly His Ser Pro Ser Phe
85 90 95

Pro Tyr Ser Pro Ser Glu Pro His Leu Gly Ser Pro Ser Gln Pro Thr

100

105

110

Ser Thr Ala Val Leu Met Pro Trp Ile His Glu Leu Pro Ala Gly Cys
 115 120 125

Thr Gln Gly Ser Glu Arg Arg Val Leu Arg Gln Leu Pro Asp Thr Ser
 130 135 140

Gly Arg Arg Trp Arg Glu Ile Ser Ala Ser Leu Leu Tyr Gln Ala Leu
 145 150 155 160

Pro Ser Ser Pro Asp His Glu Ser Pro Ser Gln Glu Ser Pro Asn Ala
 165 170 175

Pro Thr Ser Thr Ala Val Leu Gly Ser Trp Gly Ser Pro Pro Gln Pro
 180 185 190

Ser Leu Ala Pro Arg Glu Gln Glu Ala Pro Gly Thr Gln Trp Pro Leu
 195 200 205

Asp Glu Thr Ser Gly Ile Tyr Tyr Thr Glu Ile Arg Glu Arg Glu Arg
 210 215 220

Glu Lys Ser Glu Lys Gly Arg Pro Pro Trp Ala Ala Val Val Gly Thr
 225 230 235 240

Pro Pro Gln Ala His Thr Ser Leu Gln Pro His His His Pro Trp Glu
 245 250 255

Pro Ser Val Arg Glu Ser Leu Cys Ser Thr Trp Pro Trp Lys Asn Glu
 260 265 270

Asp Phe Asn Gln Lys Phe Thr Gln Leu Leu Leu Leu Gln Arg Pro His
 275 280 285

Pro Arg Ser Gln Asp Pro Leu Val Lys Arg Ser Trp Pro Asp Tyr Val
 290 295 300

Glu Glu Asn Arg Gly His Leu Ile Glu Ile Arg Asp Leu Phe Gly Pro
 305 310 315 320

Gly Leu Asp Thr Gln Glu Pro Arg Ile Val Ile Leu Gln Gly Ala Ala
 325 330 335

Gly Ile Gly Lys Ser Thr Leu Ala Arg Gln Val Lys Glu Ala Trp Gly
 340 345 350

Arg Gly Gln Leu Tyr Gly Asp Arg Phe Gln His Val Phe Tyr Phe Ser
 355 360 365

Cys Arg Glu Leu Ala Gln Ser Lys Val Val Ser Leu Ala Glu Leu Ile
 370 375 380

Gly Lys Asp Gly Thr Ala Thr Pro Ala Pro Ile Arg Gln Ile Leu Ser
 385 390 395 400

Arg Pro Glu Arg Leu Leu Phe Ile Leu Asp Gly Val Asp Glu Pro Gly
 405 410 415

Trp Val Leu Gln Glu Pro Ser Ser Glu Leu Cys Leu His Trp Ser Gln
 420 425 430

Pro Gln Pro Ala Asp Ala Leu Leu Gly Ser Leu Leu Gly Lys Thr Ile
 435 440 445

Leu Pro Glu Ala Ser Phe Leu Ile Thr Ala Arg Thr Thr Ala Leu Gln
 450 455 460

Asn Leu Ile Pro Ser Leu Glu Gln Ala Arg Trp Val Glu Val Leu Gly
 465 470 475 480

Phe Ser Glu Ser Ser Arg Lys Glu Tyr Phe Tyr Arg Tyr Phe Thr Asp
 485 490 495

Glu Arg Gln Ala Ile Arg Ala Phe Arg Leu Val Lys Ser Asn Lys Glu
 500 505 510

Leu Trp Ala Leu Cys Leu Val Pro Trp Val Ser Trp Leu Ala Cys Thr
 515 520 525

Cys Leu Met Gln Gln Met Lys Arg Lys Glu Lys Leu Thr Leu Thr Ser
 530 535 540

Lys Thr Thr Thr Thr Leu Cys Leu His Tyr Leu Ala Gln Ala Leu Gln
 545 550 555 560

Ala Gln Pro Leu Gly Pro Gln Leu Arg Asp Leu Cys Ser Leu Ala Ala
 565 570 575

Glu Gly Ile Trp Gln Lys Lys Thr Leu Phe Ser Pro Asp Asp Leu Arg
 580 585 590

Lys His Gly Leu Asp Gly Ala Ile Ile Ser Thr Phe Leu Lys Met Gly
 595 600 605

Ile Leu Gln Glu His Pro Ile Pro Leu Ser Tyr Ser Phe Ile His Leu
 610 615 620

Cys Phe Gln Glu Phe Phe Ala Ala Met Ser Tyr Val Leu Glu Asp Glu
 625 630 635 640

Lys Gly Arg Gly Lys His Ser Asn Cys Ile Ile Asp Leu Glu Lys Thr
 645 650 655

Leu Glu Ala Tyr Gly Ile His Gly Leu Phe Gly Ala Ser Thr Thr Arg
 660 665 670

Phe Leu Leu Gly Leu Leu Ser Asp Glu Gly Glu Arg Glu Met Glu Asn
 675 680 685

Ile Phe His Cys Arg Leu Ser Gln Gly Arg Asn Leu Met Gln Trp Val
 690 695 700

Pro Ser Leu Gln Leu Leu Leu Gln Pro His Ser Leu Glu Ser Leu His
 705 710 715 720

Cys Leu Tyr Glu Thr Arg Asn Lys Thr Phe Leu Thr Gln Val Met Ala
 725 730 735

His Phe Glu Glu Met Gly Met Cys Val Glu Thr Asp Met Glu Leu Leu
 740 745 750

Val Cys Thr Phe Cys Ile Lys Phe Ser Arg His Val Lys Lys Leu Gln
 755 760 765

Leu Ile Glu Gly Arg Gln His Arg Ser Thr Trp Ser Pro Thr Met Val
 770 775 780

Val Leu Phe Arg Trp Val Pro Val Thr Asp Ala Tyr Trp Gln Ile Leu
 785 790 795 800

Phe Ser Val Leu Lys Val Thr Arg Asn Leu Lys Glu Leu Asp Leu Ser
 805 810 815

Gly Asn Ser Leu Ser His Ser Ala Val Lys Ser Leu Cys Lys Thr Leu
 820 825 830

Arg Arg Pro Arg Cys Leu Leu Glu Thr Leu Arg Leu Ala Gly Cys Gly
835 840 845

Leu Thr Ala Glu Asp Cys Lys Asp Leu Ala Phe Gly Leu Arg Ala Asn
850 855 860

Gln Thr Leu Thr Glu Leu Asp Leu Ser Phe Asn Val Leu Thr Asp Ala
865 870 875 880

Gly Ala Lys His Leu Cys Gln Arg Leu Arg Gln Pro Ser Cys Lys Leu
885 890 895

Gln Arg Leu Gln Leu Val Ser Cys Gly Leu Thr Ser Asp Cys Cys Gln
900 905 910

Asp Leu Ala Ser Val Leu Ser Ala Ser Pro Ser Leu Lys Glu Leu Asp
915 920 925

Leu Gln Gln Asn Asn Leu Asp Asp Val Gly Val Arg Leu Leu Cys Glu
930 935 940

Gly Leu Arg His Pro Ala Cys Lys Leu Ile Arg Leu Gly Leu Asp Gln
945 950 955 960

Thr Thr Leu Ser Asp Glu Met Arg Gln Glu Leu Arg Ala Leu Glu Gln
965 970 975

Glu Lys Pro Gln Leu Leu Ile Phe Ser Arg Arg Lys Pro Ser Val Met
980 985 990

Thr Pro Thr Glu Gly Leu Asp Thr Gly Glu Met Ser Asn Ser Thr Ser
995 1000 1005

Ser Leu Lys Arg Gln Arg Leu Gly Ser Glu Arg Ala Ala Ser His
1010 1015 1020

Val Ala Gln Ala Asn Leu Lys Leu Leu Asp Val Ser Lys Ile Phe
1025 1030 1035

Pro Ile Ala Glu Ile Ala Glu Glu Ser Ser Pro Glu Val Val Pro
1040 1045 1050

Val Glu Leu Leu Cys Val Pro Ser Pro Ala Ser Gln Gly Asp Leu
1055 1060 1065

His Thr Lys Pro Leu Gly Thr Asp Asp Asp Phe Trp Gly Pro Thr

1070		1075		1080
Gly Pro Val Ala Thr Glu Val Val Asp Lys Glu Lys Asn Leu Tyr				
1085		1090		1095
Arg Val His Phe Pro Val Ala Gly Ser Tyr Arg Trp Pro Asn Thr				
1100		1105		1110
Gly Leu Cys Phe Val Met Arg Glu Ala Val Thr Val Glu Ile Glu				
1115		1120		1125
Phe Cys Val Trp Asp Gln Phe Leu Gly Glu Ile Asn Pro Gln His				
1130		1135		1140
Ser Trp Met Val Ala Gly Pro Leu Leu Asp Ile Lys Ala Glu Pro				
1145		1150		1155
Gly Ala Val Glu Ala Val His Leu Pro His Phe Val Ala Leu Gln				
1160		1165		1170
Gly Gly His Val Asp Thr Ser Leu Phe Gln Met Ala His Phe Lys				
1175		1180		1185
Glu Glu Gly Met Leu Leu Glu Lys Pro Ala Arg Val Glu Leu His				
1190		1195		1200
His Ile Val Leu Glu Asn Pro Ser Phe Ser Pro Leu Gly Val Leu				
1205		1210		1215
Leu Lys Met Ile His Asn Ala Leu Arg Phe Ile Pro Val Thr Ser				
1220		1225		1230
Val Val Leu Leu Tyr His Arg Val His Pro Glu Glu Val Thr Phe				
1235		1240		1245
His Leu Tyr Leu Ile Pro Ser Asp Cys Ser Ile Arg Lys Glu Leu				
1250		1255		1260
Glu Leu Cys Tyr Arg Ser Pro Gly Glu Asp Gln Leu Phe Ser Glu				
1265		1270		1275
Phe Tyr Val Gly His Leu Gly Ser Gly Ile Arg Leu Gln Val Lys				
1280		1285		1290
Asp Lys Lys Asp Glu Thr Leu Val Trp Glu Ala Leu Val Lys Pro				
1295		1300		1305

Gly Asp Leu Met Pro Ala Thr Thr Leu Ile Pro Pro Ala Arg Ile
 1310 1315 1320

Ala Val Pro Ser Pro Leu Asp Ala Pro Gln Leu Leu His Phe Val
 1325 1330 1335

Asp Gln Tyr Arg Glu Gln Leu Ile Ala Arg Val Thr Ser Val Glu
 1340 1345 1350

Val Val Leu Asp Lys Leu His Gly Gln Val Leu Ser Gln Glu Gln
 1355 1360 1365

Tyr Glu Arg Val Leu Ala Glu Asn Thr Arg Pro Ser Gln Met Arg
 1370 1375 1380

Lys Leu Phe Ser Leu Ser Gln Ser Trp Asp Arg Lys Cys Lys Asp
 1385 1390 1395

Gly Leu Tyr Gln Ala Leu Lys Glu Thr His Pro His Leu Ile Met
 1400 1405 1410

Glu Leu Trp Glu Lys Gly Ser Lys Lys Gly Leu Leu Pro Leu Ser
 1415 1420 1425

Ser

<210> 2622

<211> 179

<212> PRT

<213> Homo sapiens

<400> 2622

Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr Leu
 1 5 10 15

Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly Gly Ala
 20 25 30

Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser Asn Phe Gln
 35 40 45

Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala Lys Glu Ala Ser
 50 55 60

Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile Gly Glu Lys Leu Phe
 65 70 75 80

His Gly Val Ser Met Ser Glu Arg Cys Tyr Leu Met Lys Gln Val Leu
 85 90 95

Asn Phe Thr Leu Glu Glu Val Leu Phe Pro Gln Ser Asp Arg Phe Gln
 100 105 110

Pro Tyr Met Gln Glu Val Val Pro Phe Leu Ala Arg Leu Ser Asn Arg
 115 120 125

Leu Ser Thr Cys His Ile Glu Gly Asp Asp Leu His Ile Gln Arg Asn
 130 135 140

Val Gln Lys Leu Lys Asp Thr Val Lys Lys Leu Gly Glu Ser Gly Glu
 145 150 155 160

Ile Lys Ala Ile Gly Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn
 165 170 175

Ala Cys Ile

<210> 2623

<211> 261

<212> PRT

<213> Homo sapiens

<400> 2623

Met Ser Arg Arg Tyr Asp Ser Arg Thr Thr Ile Phe Ser Pro Glu Gly
 1 5 10 15

Arg Leu Tyr Gln Val Glu Tyr Ala Met Glu Ala Ile Gly His Ala Gly
 20 25 30

Thr Cys Leu Gly Ile Leu Ala Asn Asp Gly Val Leu Leu Ala Ala Glu
 35 40 45

Arg Arg Asn Ile His Lys Leu Leu Asp Glu Val Phe Phe Ser Glu Lys
 50 55 60

Ile Tyr Lys Leu Asn Glu Asp Met Ala Cys Ser Val Ala Gly Ile Thr
 65 70 75 80

Ser Asp Ala Asn Val Leu Thr Asn Glu Leu Arg Leu Ile Ala Gln Arg
 85 90 95

Tyr Leu Leu Gln Tyr Gln Glu Pro Ile Pro Cys Glu Gln Leu Val Thr
 100 105 110

Ala Leu Cys Asp Ile Lys Gln Ala Tyr Thr Gln Phe Gly Gly Lys Arg
 115 120 125

Pro Phe Gly Val Ser Leu Leu Tyr Ile Gly Trp Asp Lys His Tyr Gly
 130 135 140

Phe Gln Leu Tyr Gln Ser Asp Pro Ser Gly Asn Tyr Gly Gly Trp Lys
 145 150 155 160

Ala Thr Cys Ile Gly Asn Asn Ser Ala Ala Val Ser Met Leu Lys
 165 170 175

Gln Asp Tyr Lys Glu Gly Glu Met Thr Leu Lys Ser Ala Leu Ala Leu
 180 185 190

Ala Ile Lys Val Leu Asn Lys Thr Met Asp Val Ser Lys Leu Ser Ala
 195 200 205

Glu Lys Val Glu Ile Ala Thr Leu Thr Arg Glu Asn Gly Lys Thr Val
 210 215 220

Ile Arg Val Leu Lys Gln Lys Glu Val Glu Gln Leu Ile Lys Lys His
 225 230 235 240

Glu Glu Glu Glu Ala Lys Ala Glu Arg Glu Lys Lys Glu Lys Glu Gln
 245 250 255

Lys Glu Lys Asp Lys
 260

<210> 2624

<211> 377

<212> PRT

<213> Homo sapiens

<400> 2624

Met Lys Phe Pro Gly Pro Leu Glu Asn Gln Arg Leu Ser Phe Leu Leu
 1 5 10 15

Glu Lys Ala Ile Thr Arg Glu Ala Gln Met Trp Lys Val Asn Val Arg
 20 25 30

Lys Met Pro Ser Asn Gln Asn Val Ser Pro Ser Gln Arg Asp Glu Val
 35 40 45
 Ile Gln Trp Leu Ala Lys Leu Lys Tyr Gln Phe Asn Leu Tyr Pro Glu
 50 55 60
 Thr Phe Ala Leu Ala Ser Ser Leu Leu Asp Arg Phe Leu Ala Thr Val
 65 70 75 80
 Lys Ala His Pro Lys Tyr Leu Ser Cys Ile Ala Ile Ser Cys Phe Phe
 85 90 95
 Leu Ala Ala Lys Thr Val Glu Glu Asp Glu Arg Ile Pro Val Leu Lys
 100 105 110
 Val Leu Ala Arg Asp Ser Phe Cys Gly Cys Ser Ser Ser Glu Ile Leu
 115 120 125
 Arg Met Glu Arg Ile Ile Leu Asp Lys Leu Asn Trp Asp Leu His Thr
 130 135 140
 Ala Thr Pro Leu Asp Phe Leu His Ile Phe His Ala Ile Ala Val Ser
 145 150 155 160
 Thr Arg Pro Gln Leu Leu Phe Ser Leu Pro Lys Leu Ser Pro Ser Gln
 165 170 175
 His Leu Ala Val Leu Thr Lys Gln Leu Leu His Cys Met Ala Cys Asn
 180 185 190
 Gln Leu Leu Gln Phe Arg Gly Ser Met Leu Ala Leu Ala Met Val Ser
 195 200 205
 Leu Glu Met Glu Lys Leu Ile Pro Asp Trp Leu Ser Leu Thr Ile Glu
 210 215 220
 Leu Leu Gln Lys Ala Gln Met Asp Ser Ser Gln Leu Ile His Cys Arg
 225 230 235 240
 Glu Leu Val Ala His His Leu Ser Thr Leu Gln Ser Ser Leu Pro Leu
 245 250 255
 Asn Ser Val Tyr Val Tyr Arg Pro Leu Lys His Thr Leu Val Thr Cys
 260 265 270
 Asp Lys Gly Val Phe Arg Leu His Pro Ser Ser Val Pro Gly Pro Asp

275 280 285

Phe Ser Lys Asp Asn Ser Lys Pro Glu Val Pro Val Arg Gly Thr Ala
290 295 300

Ala Phe Tyr His His Leu Pro Ala Ala Ser Gly Cys Lys Gln Thr Ser
305 310 315 320

Thr Lys Arg Lys Val Glu Glu Met Glu Val Asp Asp Phe Tyr Asp Gly
325 330 335

Ile Lys Arg Leu Tyr Asn Glu Asp Asn Val Ser Glu Asn Val Gly Ser
340 345 350

Val Cys Gly Thr Asp Leu Ser Arg Gln Glu Gly His Ala Ser Pro Cys
355 360 365

Pro Pro Leu Gln Pro Val Ser Val Met
370 375

<210> 2625
<211> 575
<212> PRT
<213> Homo sapiens

<400> 2625

Met Leu Gly Val Leu Val Leu Gly Ala Leu Ala Leu Ala Gly Leu Gly
1 5 10 15

Phe Pro Ala Pro Ala Glu Pro Gln Pro Gly Gly Ser Gln Cys Val Glu
20 25 30

His Asp Cys Phe Ala Leu Tyr Pro Gly Pro Ala Thr Phe Leu Asn Ala
35 40 45

Ser Gln Ile Cys Asp Gly Leu Arg Gly His Leu Met Thr Val Arg Ser
50 55 60

Ser Val Ala Ala Asp Val Ile Ser Leu Leu Leu Asn Gly Asp Gly Gly
65 70 75 80

Val Gly Arg Arg Arg Leu Trp Ile Gly Leu Gln Leu Pro Pro Gly Cys
85 90 95

Gly Asp Pro Lys Arg Leu Gly Pro Leu Arg Gly Phe Gln Trp Val Thr
100 105 110

Gly Asp Asn Asn Thr Ser Tyr Ser Arg Trp Ala Arg Leu Asp Leu Asn
 115 120 125

Gly Ala Pro Leu Cys Gly Pro Leu Cys Val Ala Val Ser Ala Ala Glu
 130 135 140

Ala Thr Val Pro Ser Glu Pro Ile Trp Glu Glu Gln Gln Cys Glu Val
 145 150 155 160

Lys Ala Asp Gly Phe Leu Cys Glu Phe His Phe Pro Ala Thr Cys Arg
 165 170 175

Pro Leu Ala Val Glu Pro Gly Ala Ala Ala Ala Val Ser Ile Thr
 180 185 190

Tyr Gly Thr Pro Phe Ala Ala Arg Gly Ala Asp Phe Gln Ala Leu Pro
 195 200 205

Val Gly Ser Ser Ala Ala Val Ala Pro Leu Gly Leu Gln Leu Met Cys
 210 215 220

Thr Ala Pro Pro Gly Ala Val Gln Gly His Trp Ala Arg Glu Ala Pro
 225 230 235 240

Gly Ala Trp Asp Cys Ser Val Glu Asn Gly Gly Cys Glu His Ala Cys
 245 250 255

Asn Ala Ile Pro Gly Ala Pro Arg Cys Gln Cys Pro Ala Gly Ala Ala
 260 265 270

Leu Gln Ala Asp Gly Arg Ser Cys Thr Ala Ser Ala Thr Gln Ser Cys
 275 280 285

Asn Asp Leu Cys Glu His Phe Cys Val Pro Asn Pro Asp Gln Pro Gly
 290 295 300

Ser Tyr Ser Cys Met Cys Glu Thr Gly Tyr Arg Leu Ala Ala Asp Gln
 305 310 315 320

His Arg Cys Glu Asp Val Asp Asp Cys Ile Leu Glu Pro Ser Pro Cys
 325 330 335

Pro Gln Arg Cys Val Asn Thr Gln Gly Gly Phe Glu Cys His Cys Tyr
 340 345 350

Pro Asn Tyr Asp Leu Val Asp Gly Glu Cys Val Glu Pro Val Asp Pro
 355 360 365

Cys Phe Arg Ala Asn Cys Glu Tyr Gln Cys Gln Pro Leu Asn Gln Thr
 370 375 380

Ser Tyr Leu Cys Val Cys Ala Glu Gly Phe Ala Pro Ile Pro His Glu
 385 390 395 400

Pro His Arg Cys Gln Met Phe Cys Asn Gln Thr Ala Cys Pro Ala Asp
 405 410 415

Cys Asp Pro Asn Thr Gln Ala Ser Cys Glu Cys Pro Glu Gly Tyr Ile
 420 425 430

Leu Asp Asp Gly Phe Ile Cys Thr Asp Ile Asp Glu Cys Glu Asn Gly
 435 440 445

Gly Phe Cys Ser Gly Val Cys His Asn Leu Pro Gly Thr Phe Glu Cys
 450 455 460

Ile Cys Gly Pro Asp Ser Ala Leu Ala Arg His Ile Gly Thr Asp Cys
 465 470 475 480

Asp Ser Gly Lys Val Asp Gly Gly Asp Ser Gly Ser Gly Glu Pro Pro
 485 490 495

Pro Ser Pro Thr Pro Gly Ser Thr Leu Thr Pro Pro Ala Val Gly Leu
 500 505 510

Val His Ser Gly Leu Leu Ile Gly Ile Ser Ile Ala Ser Leu Cys Leu
 515 520 525

Val Val Ala Leu Leu Ala Leu Leu Cys His Leu Arg Lys Lys Gln Gly
 530 535 540

Ala Ala Arg Ala Lys Met Glu Tyr Lys Cys Ala Ala Pro Ser Lys Glu
 545 550 555 560

Val Val Leu Gln His Val Arg Thr Glu Arg Thr Pro Gln Arg Leu
 565 570 575

<210> 2626
 <211> 332
 <212> PRT
 <213> Homo sapiens

<400> 2626

Met Ala Ala Val Phe Leu Val Thr Leu Tyr Glu Tyr Ser Pro Leu Phe
 1 5 10 15

Tyr Ile Ala Val Val Phe Thr Cys Phe Ile Val Thr Thr Gly Leu Val
 20 25 30

Leu Gly Trp Phe Gly Trp Asp Val Pro Val Ile Leu Arg Asn Ser Glu
 35 40 45

Glu Thr Gln Phe Ser Thr Arg Val Phe Lys Lys Gln Met Arg Gln Val
 50 55 60

Lys Asn Pro Phe Gly Leu Glu Ile Thr Asn Pro Ser Ser Ala Ser Ile
 65 70 75 80

Thr Thr Gly Ile Thr Leu Thr Thr Asp Cys Leu Glu Asp Ser Leu Leu
 85 90 95

Thr Cys Tyr Trp Gly Cys Ser Val Gln Lys Leu Tyr Glu Ala Leu Gln
 100 105 110

Lys His Val Tyr Cys Phe Arg Ile Ser Thr Pro Gln Ala Leu Glu Asp
 115 120 125

Ala Leu Tyr Ser Glu Tyr Leu Tyr Gln Glu Gln Tyr Phe Ile Lys Lys
 130 135 140

Asp Ser Lys Glu Glu Ile Tyr Cys Gln Leu Pro Arg Asp Thr Lys Ile
 145 150 155 160

Glu Asp Phe Gly Thr Val Pro Arg Ser Arg Tyr Pro Leu Val Ala Leu
 165 170 175

Leu Thr Leu Ala Asp Glu Asp Asp Arg Glu Ile Tyr Asp Ile Ile Ser
 180 185 190

Met Val Ser Val Ile His Ile Pro Asp Arg Thr Tyr Lys Leu Ser Cys
 195 200 205

Arg Ile Leu Tyr Gln Tyr Leu Leu Leu Ala Gln Gly Gln Phe His Asp
 210 215 220

Leu Lys Gln Leu Phe Met Ser Ala Asn Asn Asn Phe Thr Pro Ser Asn
 225 230 235 240

Asn Ser Ser Ser Glu Glu Lys Asn Thr Asp Arg Ser Leu Leu Glu Lys
 245 250 255

Val Gly Leu Ser Glu Ser Glu Val Glu Pro Ser Glu Glu Asn Ser Lys
 260 265 270

Asp Cys Val Val Cys Gln Asn Gly Thr Val Asn Trp Val Leu Leu Pro
 275 280 285

Cys Arg His Thr Cys Leu Cys Asp Gly Cys Val Lys Tyr Phe Gln Gln
 290 295 300

Cys Pro Met Cys Arg Gln Phe Val Gln Glu Ser Phe Ala Leu Cys Ser
 305 310 315 320

Gln Lys Glu Gln Asp Lys Asp Lys Pro Lys Thr Leu
 325 330

<210> 2627

<211> 50

<212> DNA

<213> Homo sapiens

<400> 2627

agagcacttg cagagcctgg gacaacctcc ttattgaagg gaagagggac 50

<210> 2628

<211> 50

<212> DNA

<213> Homo sapiens

<400> 2628

taaggagtgt tggagatatg tgatttggt agtgctattt aaagacaccc 50

<210> 2629

<211> 50

<212> DNA

<213> Homo sapiens

<400> 2629

gccaaagaca taagctaggc tactgggtcc agctactact ttggtgggat 50

<210> 2630

<211> 50

<212> DNA

<213> Homo sapiens

<400> 2630

gtaaaggcta tacttgcttt gtccaccttg ggatgacgcc gcatgatatg 50

<210> 2631
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2631
tgtcagagat tgcctgtggc tctaatatgc acctcaagat ttttaaggaga 50

<210> 2632
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2632
ctttgcctaa accctatggc ctctctgtgca tctgtactca cctgtacca 50

<210> 2633
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2633
accttggggtt gagtaatgct cgtctgtgtg ttttagtttc atcacctgtt 50

<210> 2634
<211> 70
<212> DNA
<213> Homo sapiens

<400> 2634
atttatatta gtttagccaa aggataagtg tcctatgggg atgggccact gtcactgttt 60
ctctgctgtt 70

<210> 2635
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2635
cccatgtaag cacccttca ttggcattc cccacttgag aattaccett 50

<210> 2636
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2636
tggaccgtaa tgaatgaatg tacacgcat aaacgccett tgttcaagca 50

<210> 2637
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2637
tttcaagaca gaaagtgacg cagagaacct ccccggccca gtctcgacgc 50

<210> 2638
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2638
tgcactaaac agttgcccc aaagacatat cttgttttaa ggcccagacc 50

<210> 2639
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2639
gggtaggcag cttgcaccca gttctccttt atctcaactt atttctctgg 50

<210> 2640
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2640
ttaatgccag tctctcatgta acctcaggta tcttcagett gtggagaata 50

<210> 2641
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2641
tgatttttga acttaggatg tttttgagtc ccattggtca ttttgattgt 50

<210> 2642
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2642
tttgagcgat ctctcacatg atgggggttct ttagtacatg gtaacagcca 50

<210> 2643
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2643
tgtttcgtaa attaaatagg tctggcccag aagacccact caattgcctt 50

<210> 2644
<211> 50
<212> DNA

<213> Homo sapiens

<400> 2644
accttgtaag tgcctaagaa atgagactac aagctccatt tcagcaggac 50

<210> 2645
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2645
acagggcctc agcaaggag ccatacattt ttgtaacatt ttgatatgtt 50

<210> 2646
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2646
acaaccaacc agtttctttt ctagccaatc atctctgaag agttgctgtt 50

<210> 2647
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2647
cacacctgca cactcacggc tgaatatctc ctaaccagg gggaccttag 50

<210> 2648
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2648
catcctcagg tggtcaggcg tagatcacca gaataaaccc agcttccttc 50

<210> 2649
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2649
gggagtgttg tgactgaaat gcttgaaacc aaagcttcag ataaacttgc 50

<210> 2650
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2650
ctctcctcag actgctcaag agaagcacat gaaaaccatt acctgacttt 50

<210> 2651

<211> 50
<212> DNA
<213> Homo sapiens

<400> 2651
atccagcccc acccaatggc cttttgtgct tgtttcctat aacttcagta 50

<210> 2652
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2652
tttacaagaa ttgtccatgt gcttccctag gctgagctgg cattgggtcg 50

<210> 2653
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2653
catggagact tgaggagggc ttgaggttgg tgaggttagg tgcgtgtttc 50

<210> 2654
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2654
tgtctgtttt aatcatgtat ctggaatagg gtcgggaagg gttttgtgcta 50

<210> 2655
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2655
acaagtttac atgataaaaa gaaatgtgat ttgtcttccc ttctttgcac 50

<210> 2656
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2656
aaaaatacac atcacacca tttaaaagt atcttgagaa ccttttcaaa 50

<210> 2657
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2657
tgtgtgttga tcccaagaca atgaaagttt gcactgtatg ctggacggca 50

<210> 2658
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2658
acctagcga caatgatgga gagatctatg atgatattgc tgatggctgc 50

<210> 2659
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2659
gcaatccaca atctgacatt ctgaggaagc ccccaagttg atatttctat 50

<210> 2660
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2660
gcctccaacc atgttccctt cttcttagca ccacaaataa tcaaaaccca 50

<210> 2661
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2661
ggcagagaag gaggagtatg agcatcagaa gagggagctg gagcaaactc 50

<210> 2662
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2662
tggaatgtc atctaaccat taagtcatgt gtgaacacat aaggacgtgt 50

<210> 2663
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2663
tgccattaag caggaatgtc atgttcagt tcattacaaa agaaaacaat 50

<210> 2664
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2664

cctctcagga cgtgccgggt ttatcattgc tttgttatTT gtaaggactg 50

<210> 2665
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2665
cgaagaagag ccacagtgag ggagatccca tccccttgTc tgaactggag 50

<210> 2666
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2666
ttgatgatgt aacttgacct tccagagTta tggaaatTTt gtccccatgt 50

<210> 2667
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2667
ctggacaact ttgagtactg acatcattga taaataaact ggcttTgtgt 50

<210> 2668
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2668
aggTttcatc aggtggTtaa agtcgtcaaa gttgtaagtG actaaccaag 50

<210> 2669
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2669
acctgttatc ctttgtagag cacacagagt taaaagTtga atatagcaat 50

<210> 2670
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2670
gggCGgcccG gagccagcca ggcagTttta ttgaaatcTt tttaaataat 50

<210> 2671
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2671
tccctaataag aaagccacct attctttggt ggatttcttc aagtttttct 50

<210> 2672
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2672
tgccttttga gcaaataggg aatctaaggg aggaaattat caactgtgca 50

<210> 2673
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2673
gagcaccag agggattttt cagtgggaag cattacactt tgctaaatca 50

<210> 2674
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2674
acagctcaag taccctaatt tagttctttt ggactaatac aattcaggaa 50

<210> 2675
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2675
ttcctgcctg gattatttaa aaagccatgt gtggaaaccc actatttaat 50

<210> 2676
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2676
gcagaaaagg ggaactcatt tagctcacga gtgggtcgagt gaagattgaa 50

<210> 2677
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2677
acagcaaagc cccaactaat ctttagaagc atattggaac tgataactcc 50

<210> 2678
<211> 50

<212> DNA
<213> Homo sapiens

<400> 2678
atcctgagct gcacttacct gtgagagtct tcaaactttt aaaccttgcc 50

<210> 2679
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2679
acagggcctc agcaaggagg ccatacattt ttgtaacatt ttgatatggt 50

<210> 2680
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2680
acgacccatt ttgcaagact taaagccgga agaacacatt ttcagattgt 50

<210> 2681
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2681
aactgaacac aattttggga caacgtttaa acattacttt tcatacttga 50

<210> 2682
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2682
cacgcttagg gcaggggatct gggaaattcc agtgatctcc ttagcagag 50

<210> 2683
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2683
agcatgtgtc tgccatttca ttgtacgct tgttcaaac caagtttgtt 50

<210> 2684
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2684
cttgatctc taaatatggt gtgatatgaa ccagtcatt caccattggaa 50

<210> 2685
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2685
cagagggtggg agtaactgct ggtagtcct tctttggtg tgttgctcag 50

<210> 2686
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2686
tccagggacc aacattaaca caaccaatca acacatcatg ttacagaact 50

<210> 2687
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2687
tgtgggttga gaccagcact ctgtgaaacc ttgaaatgag aagtaaaggc 50

<210> 2688
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2688
ctttgcctaa accctatggc ctctgtgca tctgtactca cctgtacca 50

<210> 2689
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2689
aaatacaaac attctaatta aaggctttgc aacacatgcc ttgtctgttt 50

<210> 2690
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2690
tgggcatggt tgaatctgaa accctccttc tgtggcaact tgtactgaaa 50

<210> 2691
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2691
ctcatctaaa gacaccttc ttccactgg ctgtcaagcc acagggcacc 50

<210> 2692
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2692
gagttaccac accccatgag ggaagctcta aatagccaac acccatctgt 50

<210> 2693
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2693
cccacactgc ttgtctgtgt atacgttgtg tgccctgaaa taaatatgca 50

<210> 2694
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2694
cctgaaacag ctgccaccat cactcgcaag agaatccctt ccatctttgg 50

<210> 2695
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2695
ggaagaaccg tccagagctg agtgacgctg ggatccggga tcaaagttgg 50

<210> 2696
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2696
atttcacagt agcttatcat gctgtcttta catggggttt tcaattttgc 50

<210> 2697
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2697
tgcaagacat agaatagtgt tggaaaatgt gcaatatgtg atgtggcaaa 50

<210> 2698
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2698
agtaactcatg acttgagaga cgtggacgga gccagcttct accttgcttg 50

<210> 2699
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2699
ccttccaaag cggtcacctg atagggaagt cttacggcta ggaagttaca 50

<210> 2700
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2700
tgttataaaa gaggattttc ccaccttgac accaggcaat gtagttagca 50

<210> 2701
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2701
aataagggtg ttgccctttg ttccctcaca taatcgtgaa aggctgcttt 50

<210> 2702
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2702
cggattccaa attacttaaa gcctttatgg gaacacggta gattgtaggt 50

<210> 2703
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2703
acacttgatc tcttccttat ttctctcaga aaacctgtag gattgtgect 50

<210> 2704
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2704
cccaggagg aagacgaatc gttaaacatc tgaaagggtc aggtgagtat 50

<210> 2705
<211> 50
<212> DNA

<213> Homo sapiens
 <400> 2705
 gctagcacga ctctgccttg ttcctttgga gacaattggt atcatcaata 50
 <210> 2706
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2706
 ccctcaaatc tcccaatcta ctccaggga aagacacttc aagtgagaga 50
 <210> 2707
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2707
 ggaccaaagg ctgattcttg gagatttaac tccccacagg caatgggttt 50
 <210> 2708
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2708
 gcctccctg catctgtact caccctgtac gacaaacaca ttacattatt 50
 <210> 2709
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2709
 cagactatc cccacctgct tcccagcttc acaataaacg gctgcgtctc 50
 <210> 2710
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2710
 aactcttggc ctgagaggaa ggaaaagcaa ctcaacactc atgggtcaagt 50
 <210> 2711
 <211> 50
 <212> DNA
 <213> Homo sapiens
 <400> 2711
 tgggaaagtg tgagttaata ttggacacat tttatcctga tccacagtgg 50
 <210> 2712

<211> 50
<212> DNA
<213> Homo sapiens

<400> 2712
ttaaaggag cacattaaaa ttctcagagg acttggaag gccgcacag 50

<210> 2713
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2713
gcacagcca tctgtgaac ttcaggatct gttctgttc accatgtaac 50

<210> 2714
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2714
ttggagcgtt tttgtgttg agatattagc tcaggccaat tccaaagagt 50

<210> 2715
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2715
aggaaaccaa gccctcacag gaaagaaagc ctgattcaag aaaaacaaagt 50

<210> 2716
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2716
accctgtaag tgcctaagaa atgagactac aagctccatt tcagcaggac 50

<210> 2717
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2717
gcctcagtac agagggggct ctggaagtgt ttgttgactg aataaacgga 50

<210> 2718
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2718
ggttaacgct tctgtgagga ccttctggct cttgagatac cctaaatatt 50

<210> 2719
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2719
aggcaaaagt catctcttcc ctatattttg tcatgcttat ctctgtctc 50

<210> 2720
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2720
gagaagctc ccagtctgtc ttcccaaca tcccttcagt ttcaataagc 50

<210> 2721
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2721
ggaggttagg aagccctttt aaagtacaaa ccccgcat ggggaatttt 50

<210> 2722
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2722
gaaaggataa ttccgaacct ttgcatagtt tcggtatggg ccgtgccaac 50

<210> 2723
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2723
cagacctgtg ggctgattcc agactgagag ttgaagtatt gtgtgcatca 50

<210> 2724
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2724
aaatctcatt tgcaagttct ccattaagc aaggagtagt ttactagga 50

<210> 2725
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2725

caaacaccgg cagttgaaag gaaaaggacg gggaatgtga tggaaaagag 50

<210> 2726
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2726
tggataaatc tgagcaactt tcttctttgt gctccaggaa cctacgcact 50

<210> 2727
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2727
gacattcacc tgtttccact gagtctgagt cttcaagttt tcaatccagc 50

<210> 2728
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2728
cagtggttcc tgagagaatc ttagttcaaa ggactgcccc cgccaacccc 50

<210> 2729
<211> 51
<212> DNA
<213> Homo sapiens

<400> 2729
taggctatag agatgtgagg gattattatt agtcacacct ctagtcatgc c 51

<210> 2730
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2730
actctttgtc tttttaagac ccctaatagc cctttgtaac ttgatggctt 50

<210> 2731
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2731
acctccaaga acatctgcct ttgttgaacg tgtttattac ctgtccactc 50

<210> 2732
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2732
ttgtgtctcct gatacgcagt tgccacagtt aatccgttct gatctctgct 50

<210> 2733
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2733
acccttggtc actggtgttt caaacattct ggcaagtcac atcaatcaag 50

<210> 2734
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2734
tgtttcgtaa attaaatagg tctggcccag aagaccact caattgcctt 50

<210> 2735
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2735
ttgtaaggtt cgggggaact gactcaacat ggttctccaa ctcgaggttg 50

<210> 2736
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2736
tgggtccactg tcaactgttc tctgtgttg caaatcatg gataacacat 50

<210> 2737
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2737
ggaacttctg ctccactta cgatgaagga acttgtactc aatccatcca 50

<210> 2738
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2738
tgctcagggc acatgcacac agacatttat ctctgcactc acattttgtg 50

<210> 2739
<211> 50

<212> DNA
<213> Homo sapiens

<400> 2739
tgctccttga acctgagtga agaaatatac tctgtccttt gtacctgcgt 50

<210> 2740
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2740
tgcaactctac cagatttgaa catctagtga gggttcacatt cataactaagt 50

<210> 2741
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2741
gggtgtgatg aatagcgaat catctcaaat ccttgagcac tcagtcctagt 50

<210> 2742
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2742
tgctgaaagt ggcccaaag gggtactagt ttttaagctc ccaactcccc 50

<210> 2743
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2743
tgtttcgtaa attaaatagg tctggccag aagaccact caattgcctt 50

<210> 2744
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2744
agaatggcag acctgtttgc tgaagtgttc ataagataac aataggcttg 50

<210> 2745
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2745
ggcccagtcg taatgtaacc aatgatgcca tgtcgatatt ggaaaccata 50

<210> 2746
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2746
tcttgccta gtcattgtgg caaccccatc tgacacctg ttagtagacct 50

<210> 2747
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2747
aagagtaaga ggcaacagat agagtgtcct tggtaataag aagtcagaga 50

<210> 2748
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2748
tttccaatgc tccttgctcc attttaaact tgctgtcctt tataagagaa 50

<210> 2749
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2749
acattcatct gtttccactg aggtctgagt cttcaagttt tcaccccgagc 50

<210> 2750
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2750
tgtgtgcgac agggaggaag ttccaataaa gcaacaacaa gcttcaagga 50

<210> 2751
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2751
ctccaccacc tgaccagagt gttctcttca gaggactggc tcctttccca 50

<210> 2752
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2752
ccccaaccac aggcacacgg caaccatttg aaataaaaact ccttcagcct 50

<210> 2753
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2753
cgctcaaagg tctactgagac ttttcctca ctaaagaga ccaaggctca 50

<210> 2754
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2754
ccctttgtga gaagaagcag gtttccttc ctatggattg atgtgacct 50

<210> 2755
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2755
agaaggacc ctggttgaga accacggttg tatagaaagg aattgaagca 50

<210> 2756
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2756
agggtccagc aactgaataa atacctctcc cagtgtaat ctggagccaa 50

<210> 2757
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2757
gaaggaagaa gtgggttgga agaagtggg tgggacgaca gtgaaatcta 50

<210> 2758
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2758
tgaaatatgg gaaagttgct gctattgatt cagggtctgt cttggaggca 50

<210> 2759
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2759
tgattacaaa aggcgtattc ttctcatggt tctgcaatga gaggaagtgt 50

<210> 2760
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2760
aggagctatg attagacttc tgtagactt cctcactcta tcaccacat 50

<210> 2761
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2761
agttgttagt tgccctgcta cctagtttgt tagtgcattt gagcacacat 50

<210> 2762
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2762
aagtgaagt gggatgaattc tactttttat gttggagtgg accaatgtct 50

<210> 2763
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2763
catttgatc ctagggccac gaaccacga gaatgtctc tgacttcag 50

<210> 2764
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2764
gcactgaata tcgaacaagc actcaaattg aagtatcagt catgttttgt 50

<210> 2765
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2765
tctacctgca gtctccattg ttccagagt gaacttgtaa ttatcttgtt 50

<210> 2766
<211> 50
<212> DNA

<213> Homo sapiens

<400> 2766
ggccagcctg gacccaatca tgaggaagat gcagactctt atgagaacat 50

<210> 2767
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2767
tgggattcat tggcccatag gtacattgga aaatgtatat ctctccagct 50

<210> 2768
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2768
accgtgtaaa gtggggatgg ggtaaaagtg gttaacgtac tgttgatca 50

<210> 2769
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2769
tggcaaatc tgcgagtgtg ataatttcaa ctgtgataga tccaatggct 50

<210> 2770
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2770
cctaggggtga aacacgtgac agaagaataa agactattga atagtcctct 50

<210> 2771
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2771
tgagccttct acacctgtgc tggcgctgga aaattatttg tgctcagctg 50

<210> 2772
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2772
tgctattgcc ttcctatttt gcataataaa tgcttcagtg aaaatgcagc 50

<210> 2773

<211> 50
<212> DNA
<213> Homo sapiens

<400> 2773
gtgtaacaca gtgccttcaa taaatggat agcaaatgtt ttgacatgaa 50

<210> 2774
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2774
tgccaagcac agtgcctgca tgtatttata caataaatgt gaaattctgt 50

<210> 2775
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2775
acattgtaat agaaacagat ttcccaaatt ccagcctggc atgaggtaat 50

<210> 2776
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2776
tcactatctt tctgataaca gaattgccaa ggcagcggga tctcgtatct 50

<210> 2777
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2777
tctcaaagga gtaactgcag cttggtttga aattgtact gtttctatca 50

<210> 2778
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2778
gacaggatcc cccagagacc ccatttgcct ctcaaacctc agaccttcaa 50

<210> 2779
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2779
agtgccttcc ctgcctgtgg gggctcatgct gccactttta atgggtcctc 50

<210> 2780
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2780
attccattct attgtttaca caacgattac tcgaagatga ctgcaaagg 50

<210> 2781
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2781
actgagagtg ggtgtcggat atattccttt tgtcttcac actttctgaa 50

<210> 2782
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2782
gaagctgcta ggggaaggac tggcctggct ccagaatgtt gttgcctttt 50

<210> 2783
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2783
agccctgcaa aaattcagag tccttgcaaa attgtctaaa atgtcagtg 50

<210> 2784
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2784
ggcgagagaa ggtggagagt aaagacccaa cattactaac aatgatacag 50

<210> 2785
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2785
aatatatgca attctccctc ccccgccct tcctgaccc ctaagttatt 50

<210> 2786
<211> 50
<212> DNA
<213> Homo sapiens

<400> 2786

aggagagactc tcagccttca gcttcctaaa ttctgtgtct gtgactttcg 50

<210> 2787
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2787
 atgctgggtg catgtgacat ttgttgagtc tcgggcatgt tcacgggtgg 50

<210> 2788
 <211> 51
 <212> DNA
 <213> Homo sapiens

<400> 2788
 caccgcctct gcctccgcct cttccactgg agagcccag gtcaaaagggt c 51

<210> 2789
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2789
 atttggacag atgcagaagg aactgttagt gagtcaagac aaacacatct 50

<210> 2790
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2790
 acattttcct ccgcataagc ctgcgtcaga ttaaaacact gaactgacaa 50

<210> 2791
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2791
 tccagccagc cagctcattt cactttacac cctcatggac tgggattata 50

<210> 2792
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2792
 ctggtctgtg tcgttggtt tatgacagga agtgcctgtg gggtatctta 50

<210> 2793
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2793
 accaaaaagg gctacattac caccactgta tcataaaaagc cagccacctt 50

<210> 2794
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2794
 gattcttgctc tggctaataa atcatcacca actgccttct cctacaggga 50

<210> 2795
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 2795
 cccagacga aaatacaciaa tgcattggaga gctcccgtag gtggtaata 50

<210> 2796
 <211> 1549
 <212> DNA
 <213> Homo sapiens

<400> 2796
 cttcagccgt gtagcaaat ggataaccgg ttgcctccca aaaaagtcc aggtttctgt 60
 tcctttegct atggattgtc ttcccttggt cactgttgta atgttataat aacagcacag 120
 cgtgcgtgcc tgaacctcac aatggtagtc atggtaata gcacagatcc acatgggttg 180
 cccaacacct ccacaagaa gtcctggat aatataaga accctatgta taattggagc 240
 ccagatatcc agggaaatcat cttgagttcc acctcctatg gtgtcatcat catccaagtt 300
 cctgttggtat acttctctgg aatatattct acaaagaaaa tgattggctt tgcattatgc 360
 ctcagctctg tgttaagcct gtcacccca ccagcagctg gaattggagt agcttgggtc 420
 gttgtatgct gagcagttca gggagcagcc caggggatag ttgcaacagc ccagtttgaa 480
 atatatgtca aatgggctcc tcccctggaa cgaggccgac ttacttctat gagtatcat 540
 ggggttttgc tgggaccctt tattgtccta cttgtgactg gagttatctg tgaatctctg 600
 ggctggccca tgggtcttcta tatttttggg gcttgtggct gtgccgatg tcttctctgg 660
 ttogttctgt tttatgatga ccccaagac caccatgta taagcatcag tgaaggagaa 720
 tacatcacat cctccctggt ccagcaggtc agttcaagta gacaatctct gcctatcaag 780
 gctatactta agtcgcttcc agtctgggct atttccattg gtagttttac gtttttctgg 840
 tcacataaca tcattgacat atacactcca atgtttatca actccatgct tcattgtaat 900
 ataaaagaga atgggttctt gtcttccctt ccctatttgt ttgcctggat ctgtggtaac 960

ctagcaggtc agttatcaga cttcttctcg accaggaata ttctcagcgt aattgctgtc 1020
 cggaaactct tcacagcagc aggatttctc cttcctgcaa tctttggtgt ctgcctgcct 1080
 tacctgagtt ccacettcta cagcattgtc attttcttaa tacttgctgg tgcaacaggc 1140
 agcttttgct tgggtggagt gtttataaat ggcttgata ttgctccag atattttgga 1200
 tttattaaag catgttcaac tttaactgga atgataggag gactaattgc ttccactttg 1260
 actggattga tccttaagca ggatccgga tccgctggt ttaaaacctt catcctgatg 1320
 gcagccatta atgtgactgg cctaatttct taccttatag ttgctacagc agaaattcag 1380
 gactgggcta aagaaaaaca acacacacgt ctctgaagtg tgaaacagag cacttgcala 1440
 gctgggaca acctccttat tgaagggaag agggaccagc acatgaggct gaggctgagg 1500
 ggcagtcacc agcaccagga agaagggtgt agggaggatc ctaggggct 1549

<210> 2797

<211> 626

<212> DNA

<213> Homo sapiens

<400> 2797

tttttttttc catttctatg agtttaatac agtaccaggg ttcagacatt tccatgaaat 60
 attaactcta aacaaacata acagcattct agcagtagtc ttcagctaac atgctaattg 120
 gattaagttg ctagaaccct ctgttagtat gtggacacaa gacagattgg catacctggt 180
 ttaggcata ctccaaacaa agtttgtaac ccaggattac tagattccta aaccctattt 240
 atgcaaggac aggggtgtct ttaaatagca ctaggcaaat cacatatctc caacactcct 300
 taattttcca gtgcacaaata acttctttta tttattaggc taattaggga accttctaga 360
 actctctaga gataaagatc attaaggcct tatagtagtc cttcaaacac taccaaccac 420
 ttcctaaaag atgtgtgtcc agttaaagta ttttaaatat tagctacaac cttatagagg 480
 attaagaata cacacacacg cacacacaca cacacctgtc tatactagaa tattttaaag 540
 taagtatatg acaatataat agctagataa aacaaaagaa taaggatatat ggggtttata 600
 aagacacaca gtataatgat ggtgtc 626

<210> 2798

<211> 5601

<212> DNA

<213> Homo sapiens

<400> 2798

atggaccctg ttggcctcca gctcggaac aagaacctgt ggagctgtct tgtgaggctg 60
 ctcaccaag acccagaatg gctgaacgcc aagatgaagt tcttcctccc caacacggac 120
 ctggattcca ggaacgagac cttggaccct gaacagagag tcacctgca actcaacaag 180

ctgcatgtcc aggggttcgga cacctggcag tctttcattc attgctgtg catgcagctg	240
gagggtgcctc tggacctgga ggtgcttctg ctaagtactt ttggetatga tgatgggttc	300
accagccagc tgggagctga ggggaaaagc caacctgaat ctgagctcca ccatggcctg	360
aagcgcccac atcagagctg tgggtcctca ccccgccgga agcagtgcaa gaagcagcag	420
ctagagttgg ccaagaagta cctgcagctc ctgctgacct ctgccagca gcgtacagc	480
agccaaatcc ctgggtcagg gcagcccccac gccttcacc aggtctatgt cctccaate	540
ctgcgcggg ccacagctc cttagacact ccggaggggg ccattatggg ggagctcaa	600
gtggaagatg gtgctgagct gagcatctcg gacctcttca acaccagggt taacaagggc	660
ccgagggtga ccgtgctttt ggggaaggct ggcattggga agaccacgct gggccaccg	720
ctctgccaga agtgggcaga gggccatctg aactgtttcc aggcctgtt cctttttgaa	780
ttccgccagc tcaacttgat cacgagggtc ctgacacctg ccgagctcct ttttgatctg	840
tacctgagcc ctgaatcgga ccacgacact gtcttccagt acctggagaa gaacgctgac	900
caagtctctg tgatctttga tgggctagat gaggccctcc agcctatggg tctgatggc	960
ccaggccagc tctcaccctt tttctccat ctctgcaatg ggacctcct gcctggtgc	1020
cgggtgatgg ctacctccg tccagggaag ctgcctgcct gcctgcctgc agaggcagcc	1080
atggtccaca tgttgggctt tgatgggcca cgggtggaag aatatgtgaa tcacttcttc	1140
agcgccagc catcgcgga gggggccctg gtggagtac agacaaatgg acgtctccga	1200
agcctgtgtg cgggtgccc actgtgcca gtgcctgtc tctgcctcca ccatctgctt	1260
cctgaccagc cccaggcca gtctgtggcc ctctgcccc acatgactca gctctatatg	1320
cagatgggtc tgcctcagc cccctctggg cacttgccca cctcgtccct actggacctg	1380
ggggagggtg ccttgaggg cctggagaca ggaagggtta tcttctatgc aaaagatatt	1440
gctccacctt tgatagcttt tggggccact cacagcctgc tgacttcctt ctgctctgc	1500
acaggccctg ggcaccagca gacaggctat gctttcacc acctcagcct gcaggagttt	1560
cttgctgccc tgcacctgat ggccagcccc aagggtgaaca aagacacact taccagtat	1620
gttaccctcc attccgctg ggtacagcgg accaaagcta gactgggctt ctgagaccac	1680
ctccccacct tctggcggg cctggcatcc tgcacctgcc gccccttctt tagccacctg	1740
gcgcagggca atgaggactg tgtgggtgcc aagcaggctg ctgtagtga ggtgttgaa	1800
aagttggcca cccgcaagct cacagggcca aagggtgtag agctgtgtca ctgtgtggat	1860
gagacacagg agcctgagct ggccagtctc accgcacaaa gcctccccta tcaactgccc	1920
ttccacaatt tccactgac ctgcaccgac ctggccaccc tgaccaacat cctagagcac	1980

agggaggccc ccatccacct ggattttgat ggctgtcccc tggagcccca ctgcccctgag 2040
 gctctggtag gctgtgggca gatagagaat ctacgcttta agagcaggaa gtgtggggat 2100
 gcctttgcag aagccctctc caggagcttg ccgacaatgg ggaggctgca gatgctgggg 2160
 ttagcaggaa gtaaaatcac tgcccagggc atcagccacc tggtgaaagc ttgcccctc 2220
 tgtccacagc tgaagaagt cagttttcgg gacaaccagc tcagtgaacca ggtggtgctg 2280
 aacattgtgg aggttctccc tcacctacca cggtcccga agcttgacct gagcagcaac 2340
 agcatctgcg tgtcaacct actctgcttg gcaagggtgg cagtcacgtg tctaccgtc 2400
 aggatgcttc aggccaggga gcggaccatc atcttcttc ttccccgcc cacagagaca 2460
 actgcagagc tacaagagc tccagacctg caggaaagtg acggccagag gaaaggggct 2520
 cagagcagaa gcttgacgct caggctgcag aagtgtcagc tccaggtcca cgatcgagg 2580
 gccctcatag ccttgcctca ggaaggccct cactggagg aagtggacct ctacgggaac 2640
 cagctggaag atgaaggctg tcggtgatg gcagaggctg catcccagct gcacatcgcc 2700
 aggaagctgg acctcagcga caacgggctt tctgtggccg gggtcattg tgtgctgagg 2760
 gccgtgagtg cgtgtgggac cctggcagag ctgcacatca gcctgcagca caaaactgtg 2820
 atcttcatgt ttgccaggga gccagaggag cagaaggggc ccaggagag ggctgcattt 2880
 cttgacagcc tcatgtccca gatgccctct gagctgcctc tgagctcccg aaggatgagg 2940
 ctgacacatt gtggcctcca agaaaagcac ctagagcagc tctgcaaggc tctgggagga 3000
 agctgccacc tcggctcacct ccacctcgac ttctcaggca atgctctggg ggaatgaagg 3060
 gcagcccgcc tggctcagct gctcccaggg ctgggagctc tgcagtcctt gaacctcagt 3120
 gagaacgggt tgtccctgga tgcctgtgtg ggcttgggtc ggtgcttctc cactctgcag 3180
 tggctcttcc gcttggacat cagctttgaa agccaacaca tctctctgag aggggacaag 3240
 acaagcaggg atatgtgggc cactggatct ttgccagact tcccagctgc agccaagtct 3300
 ttagggttcc gtcagcgtg catccccagg agctcttgcc tcagtgagtg tctcttgagg 3360
 cccccaagcc tcaccgcct ctgtgccact ctgaaggact gccggggacc cctggaactg 3420
 caattgtctt gtgagttcct gagtgaccag agcctggaga ctctactgga ctgcttacct 3480
 caactccctc agctgagcct gctgcagctg agccagacgg gactgtcccc gaaaagcccc 3540
 ttctctgttg ccaacacctt aagcctgtgt ccacgggtta aaaaggtgga tctcaggtcc 3600
 ctgaccatg caactttgca cttcagatcc aacgaggagg aggaaggcgt gtgctgtggc 3660
 aggttcacag gctgcagcct cagccaggag cagtagagt cactctgctg gttgctgagc 3720
 aagtgtaaa acctcagca ggtgatctc tcagcaaacc tgctggcgca cagcggaetc 3780
 agatgccttc tggaatgtct gccgcagggt cccatctccg gtttgcttga tctgagtcac 3840

```

aacagcattt ctcaggaag tgcctgtac ctgctggaga cactgccctc ctgcccacgt 3900
gtccgggagg cctcagtga cctgggctct gagcagagct tccggattca cttctccaga 3960
gaggaccagg ctgggaagac actcaggcta agtgagtga gcttccggcc agagcacgtg 4020
tccaggctgg ccaccggctt gagcaagtcc ctgcagctga cggagctcac gctgaccag 4080
tgctgctgg gccagaagca gctggccatc ctctgagct tggggggcg acccgagg 4140
ctgttcagcc tcagggtgca ggagccgtgg gcggacagag ccagggttct ctccctgtta 4200
gaagtctgag ccaggccctc aggcagtgtc actgaaatca gcatctccga gaccagcag 4260
cagctctgtg tccagctgga atttcctcgc caggaagaga atccagaagc tgtggcactc 4320
aggttggttc actgtgacct tggagccac cacagccttc ttgtcgggca gctgatggag 4380
acatgtgcca ggctgcagca gctcagcttg tctcaggta acctctgtga ggacgatgat 4440
gccagttccc tgctgtgca gagcctctg ctgtccctct ctgagctgaa gacatttcgg 4500
ctgacctca gctgtgtgag caccgagggc ctgcccacc tggcatctgg tctgggccac 4560
tgccaccact tggaggagct ggacttgtct aacaatcaat ttgatgagga gggcaccaag 4620
gcgctgatga gggcccttga ggggaaatgg atgctaaga ggctggacct cagtcacctt 4680
ctgtgaaca gctccacctt ggcttgtct actcacagac taagccagat gacctgcctg 4740
cagagcctca gactgaacag gaacagtatc ggtgatgtcg gttgtgcca ctttctgag 4800
gctctcaggg ctgccaccag cctagaggag ctggacttga gccacaacca gattggagac 4860
gctggtgtcc agcacttagc taccatcctg cctgggtgc cagagctcag gaagatagac 4920
ctctcagggg atagcatcag ctccagcggg ggagtgagct tggcagagtc tctctgttct 4980
tgcaggcgcc tggaggagtt gatgcttggc tgcaatgcc tgggggatcc cacagccctg 5040
gggtcggttc aggagctgcc ccagcacctg agggtcctac acctaccatt cagccatctg 5100
ggcccagggt gggccctgag cctggccag gccctggatg gatccccca tttggaagag 5160
atcagcttgg cggaaaacaa cctggctgga ggggtcctgc gttctgtat ggagctccc 5220
ctgctcagac agatagacct ggtttcctgt aagattgaca accagactgc caagctcctc 5280
acctccagct tcacgagctg cctgcccctg gaagtaatct tgctgtcctg gaatctcctc 5340
ggggatgagg cagctgccga gctggcccag gtgctgccga agatggggcg gctgaagaga 5400
gtggacctgg agaagaatca gatcacagct ttgggggctt ggctcctggc tgaaggactg 5460
gccagggggt ctagcatcca agtcatccgc ctctggaata acccatttcc ctgcgacatg 5520
gccagcacc tgaagagcca ggagcccagg ctggactttg cttcttttga caaccagccc 5580
caggccctt ggggtacttg a 5601

```

<210> 2799

<211> 5133

<212> DNA

<213> Homo sapiens

<400> 2799

cctctttcac cctgtctagg ttgccagcaa atcccacggg cctcctgacg ctgccccctgg 60
 ggccacaggt cctctgagtg ctggaaggat gaaggattcc tgcactactg tgatggccat 120
 ggcgtgctg tctgggttct ttttctctgc gccggcctcg agctacaacc tggacgtgcg 180
 gggcgcgcg agcttctccc caccgcgcgc cgggaggcac ttggataacc cgctcctgca 240
 ggtcggaac ggggtcatcg tgggagctcc aggggagggg aacagcacag gaagcctcta 300
 tcagtccag tcgggcacag gacactgcct gccagtcacc ctgagagggt ccaactatac 360
 ctccaagtac ttgggaatga ccttggcaac agacccca ca gatggaagca ttttggcctg 420
 tgacctggg ctgtctcgaa cgtgtgacca gaacacctat ctgagtggcc tgtgttacct 480
 cttccgccag aatctcgagg gtcccatgct gcaggggcgc cctggtttct aggaatgtat 540
 caagggaac gtacacctg tatttctggt tgatggttcg atgagcttgc agccagatga 600
 atttcagaaa attctggact tcatgaagga tgtgatgaag aaactcagca acacttcgta 660
 ccagtttgct gctgttcagt ttccacaag ctacaaaaca gaatttgatt tctcagatta 720
 tgttaaatgg aaggacctg atgctctgct gaagcatgta aagcacatgt tctgtttgac 780
 caataccttt ggtgccatca attatgtcgc gacagagggt ttccgggagg agctgggggc 840
 ccggccagat gccaccaaag tgcttatcat catcacggt ggggaggcca ctgacagtgg 900
 caacatcgat gcggccaaag acatcatcgc ctacatcgc gggattggaa agcattttca 960
 gaccaaggag agtcaggaga cctccacaa atttgcacaa aaaccgcga gcgagtttgt 1020
 gaaaattctg gacacatttg agaagctgaa agatctattc actgagctgc agaagaagat 1080
 ctatgtcatt gagggcacia gcaaacagga cctgacttcc ttcaacatgg agctgtctctc 1140
 cagcggcatc agtgcagacc tcagcagggg ccatgcagtc gtgggggcag taggagccaa 1200
 ggactgggct gggggcttct ttgacctgaa ggcagacctg caggatgaca catttattgg 1260
 gaatgaacca ttgacaccag aagtgagagc aggtattttg ggttacaccg tgacctggct 1320
 gccctcccg caaaagactt cggtgctggc ctccgggagcc cctcgatacc agcacatggg 1380
 ccgagtgtg ctgttccaag agccacaggg cggaggacac tggagccagg tccagacaat 1440
 ccatgggacc cagattggct cttatttcgg tggggagctg tgtggcgctc acgtggacca 1500
 agatggggag acagagctgc tgctgattgg tgcctcactg ttctatgggg agcagagagg 1560
 aggcgggggt tttatctacc agagaagaca gttgggggtt gaagaagtct cagagctgca 1620

gggggacccc ggctacccac tcgggcgggt tggagaagcc atcactgctc tgacagacat 1680
 caacggcgat gggctggtag acgtggctgt gggggccccc ctggaggagc agggggctgt 1740
 gtacatcttc aatgggaggc acggggggct tagtccccag ccaagtcagc ggatagaagg 1800
 gacccaagtg ctctcagaa ttcatgggt tggacgtcc atccatggg tgaaggacct 1860
 tgaaggggat ggcttggcag atgtggctgt gggggctgag agccagatga tcgtgctgag 1920
 ctcccgcccc gtggtggata tggtcaccct gatgtccttc tctccagctg agatcccagt 1980
 gcatgaagtg gagtgctctc attcaaccag taacaagatg aaagaaggag ttaatatcac 2040
 aatctgttcc cagatcaagt ctctctaccc ccagttccaa ggccgcctgg ttgccaatct 2100
 cacttacact ctgcagctgg atggccaccg gaccagaaga cgggggttgt tcccaggagg 2160
 gagacatgaa ctgagaagga atatagctgt caccaccagc atgtcatgca ctgacttctc 2220
 atttcatttc ccggtatgtg ttcaagacct catctccccc atcaatgttt ccctgaattt 2280
 ctctcttttg gaggaggag ggacaccgag ggaccaaagg gcgcagggca aggacatacc 2340
 gccatccctg agaccctccc tgcactcggg aacctgggag atcccttttg agaagaactg 2400
 tggggaggac aagaagtgtg aggcaaactt gagagtgtcc ttctctctg caagatccag 2460
 agccctgcgt ctaactgctt ttgccagcct ctctgtggag ctgagcctga gtaacttgga 2520
 agaagatgct tactgggtcc agctggacct gcacttcccc ccgggactct ccttccgcaa 2580
 ggtggagatg ctgaagcccc atagccagat acctgtgagc tgcgaggagc ttctgaaga 2640
 gtccaggctt ctgtccaggg cattatcttg caatgtgagc tctcccatct tcaaagcagg 2700
 ccactcgggt gctctgcaga tgatgtttaa tacactggta aacagctcct ggggggactc 2760
 ggttgaattg cagccaatg tgacctgtaa caatgaggac tcagacctcc tggaggacaa 2820
 ctcagccact accatcatcc ccacctctga ccccatcaac atccctcatcc aggaccaaga 2880
 agactccaca ctctatgtca gtttcacccc caaaggcccc aagatccacc aagtcaagca 2940
 catgtaccag gtgaggatcc agccttccat ccacgaccac aacataccca ccctggaggc 3000
 tgtggttggt gtgccacagc ctccagcga gggggcccat acacaccagt ggagcgtgca 3060
 gatggagcct ccggtgcctt gccactatga ggatctggag aggcctcccg atgcagctga 3120
 gccttgtctc ccggagagcc tgttccgctg cctgttgtc ttcaggcagg agatcctcgt 3180
 ccaagtgate gggactctgg agctggtggg agagatcgag gcctcttcca tgttcagcct 3240
 ctgcagctcc ctctccatct ccttcaacag cagcaagcat ttccacctct atggcgacaa 3300
 cgctccctg gccagggttg tcatgaagggt tgacgtgggt tatgagaagc agatgtctta 3360
 cctctacgtg ctgagcggga tcggggggct gctgctgctg ctgctcattt tcatagtgtc 3420
 gtacaagggt ggtttcttca aacggaacct gaaggagaag atggaggctg gcagagggtg 3480

```

ccccgaatgga atccctgcag aagactctga gcagctggca tctgggcaag aggctgggga 3540
tcccggctgc ctgaagcccc tccatgagaa ggactctgag agtggtggtg gcaaggactg 3600
agtccaggcc tgtgaggtgc agagtgccca gaactggact caggatgccc agggccactc 3660
tgccctctgcc tgcattctgc cgtgtgccct cgggcgagtc actgcctctc cctggccctc 3720
agtttcccta tctcgaacat ggaactcatt cctgaatgtc tcctttgcag gtcataagg 3780
aagacctgct gagggaccag ccaagagggc tgcaaaagtg agggcttgctc attaccagac 3840
ggttcaccag cctctcttgg ttctctcctt ggaagagaat gtctgatcta aatgtggaga 3900
aactgtagtc tcaggaccta gggatgttct ggccctcacc cctgccctgg gatgtccaca 3960
gatgcctcca cccccagaa cctgtccttg cacactcccc tgcactggag tccagtctct 4020
tctgctggca gaaagcaaat gtgacctgtg tcactacgtg actgtggcac acgccttggt 4080
cttggccaaa gaccaaattc cttggcatgc cttccagcac cctgcaaaat gagaccctcg 4140
tggccttccc cagcctcttc tagagccgtg atgcctcctt gttgaagctc tggtgacacc 4200
agcctttctc ccaggccagg ctctctcctg tcttctcgca ttcacccaga cagctccctc 4260
tgctgaacc ttccatctcg cccacccctc cttccttgac cagcagatcc cagctcacgt 4320
cacacacttg gttgggtcct cacatcttcc acacttccac caccctgcac tactccctca 4380
aagcacacgt catgtttctt catccggcag cctggatgtt ttttccctgt ttaatgattg 4440
acgtacttag cagctatctc tcagtgaact gtgagggtaa aggtataact tgtcttgctc 4500
accttgggat gacgccgat gatatgtcag ggcgtgggac atctagtagg tgcttgacat 4560
aatttactg aattaatgac agagccagtg ggaagataca gaaaagagg gcgcggggctg 4620
ggcgcggtgg ttcacgcctg taatcccagc actttgggag gccaaggagg gtggatcacc 4680
tgaggctcagg agtttagagg cagcctggcg aaaccccatc tctactaaaa atacaaaatc 4740
caggcggtgt ggcacacacc tgtagtccca gctactcagg aggttgaggt aggagaattg 4800
cttgaacctg ggaggtggag gttgcagtga gccaaagatt cgccattgca ctccagcctg 4860
ggcaacacag cgagactccg tctcaaggaa aaaataaaaa taaaagcgg gcacggggccc 4920
ggacatcccc acccttgagg gctgtcttct caggctctgc cctgccctag ctccacaccc 4980
tctcccagga cccatcacgc ctgtgcagtg gccccacag aaagactgag ctcaaggtgg 5040
gaaccacgtc tgctaacttg gagccccagt gccaaagaca gtgcctgcat gtatttatcc 5100
aataaatgtg aaattctgtc caaaaaaaaa aaa 5133

```

<210> 2800

<211> 2376

<212> DNA

<213> Homo sapiens

<400> 2800

```

cgcgcgcccc ctgtcctccg gcccgagatg aatcctgcgg cagaagccga gttcaacatc      60
ctcctggcca cgcactccta caaggttact cactataaac aatatccacc caacacaagc      120
aaagtttatt cctactttga atgccgtgaa aagaagacag aaaactccaa attaagggaag      180
gtgaaatatg aggaaacagt attttatggg ttgcagtaca ttcttaataa gtacttaaaa      240
ggtaaagtag taaccaauga gaaaatccag gaagccaaag atgtctacaa agaacatttc      300
caagatgatg tctttaatga aaagggatgg aactacattc ttgagaagta tgatgggcat      360
cttccaatag aaataaaagc tgttcctgag ggctttgtca ttccagagg aaatgttctc      420
ttcacgggtg aaaacacaga tccagagtgt tactggctta caaattggat tgagactatt      480
cttggtcagt cctgggtatcc aatcacagtg gccacaaatt ctagagagca gaagaaaata      540
ttggccaaat atttgtaga aacttctggg aacttagatg gtctggaata caagttacat      600
gattttggct acagaggagt ctcttcccaa gagactgctg gcataggagc atctgctcac      660
ttggttaact tcaaggaaac agatacagta gcaggacttg ctctaattaa aaaatattat      720
ggaacgaaag atcctgttcc aggcattctc gttccagcag cagaacacag taccataaca      780
gcttggggga aagaccatga aaaagatgct ttgaaacata ttgtaacaca gttttcatca      840
gtgcctgtat ctgtggtcag cgatagctat gacatttata atgcgtgtga gaaaatatgg      900
gggtgaagatc taagacattt aatagtatcg agaagtaac aggcaccact aataatcaga      960
cctgattctg gaaaccctct tgacactgtg ttaaagggtt tggagatttt aggtagaag      1020
tttctgttta ctgagaactc aaagggttac aagtgtgtgc caccttatct tagagttatt      1080
caaggggatg gagtagatat taatacctta caagagattg tagaaggcat gaaacaaaaa      1140
atgtggagta ttgaaaatat tgccttcggt tctggtggag gtttgctaca gaagttgaca      1200
agagatctct tgaattgttc cttcaagtgt agctatgttg taactaatgg ccttgggatt      1260
aacgtcttca aggaccagat tgctgatccc aacaaaaggc ccaaaaaggg ccgattatct      1320
ttacatagga cgccagcagg gaattttggt acactggagg aagggaaaagg agaccttgag      1380
gaatatggtc aggatcttct ccatactgtc ttcaagaatg gcaagggtgac aaaaagctat      1440
tcatttgatg aaataagaaa aaatgcacag ctgaatattg aactggaagc agcacatcat      1500
taggccttat gactgggtgt gtgtgtgtgt tatgtaatac ataatgttta ttgtacagat      1560
gtgtgggggt tgtgttttat gatacattac agccaaatta tttgttggtt tatggacata      1620
ctgcccttct atttttttct ttttccagtg tttaggatgat ctcaaattag gaaatgcatt      1680
taaccatgta aaagatgagt gctaaagtaa gcttttttagg gccctttgcc aataggtagt      1740

```

cattcaatct ggtattgatc ttttcacaaa taacagaact gagaaacttt tatatataac 1800
 tgatgatcac ataaaacaga ttgcatataa attaccatga ttgctttatg tttatattta 1860
 acttgatatt ttgtacaaac aagatttgtg aagatatatt tgaagtttca gtgatttaac 1920
 agtctttcca acttttcatg atttttatga gcacagactt tcaagaaaat acttgaaaat 1980
 aaattacatt gcctttttgc cattaatcag caaataaaac atggccttaa caaagtgtgt 2040
 tgtgttattg tacaatttga aaattatgtc gggacatacc ctatagaatt actaacctta 2100
 ctgccctctg tagaatatgt attaatcatt ctacattaaa gaaaataatg gttcttactg 2160
 gaatgtctag gcactgtaca gttattatat atcttgggtg ttgtattgta ccagtgaat 2220
 gccaaatttg aaaggcctg actgcaattt tatatgtcag agattgcctg tggctctaatt 2280
 atgcacctca agattttaag gagataatgt ttttagagag aatttctgct tccactatag 2340
 aatatataca taaatgtaaa atacttacia aagtgg 2376

<210> 2801

<211> 1158

<212> DNA

<213> Homo sapiens

<400> 2801

gcctgctgct ctggcccttg gtctctgctc ctctccagc atgggtgtgc tgaagctccc 60
 tggaggctcc agcttggcag cgttgacagt gacactgatg gtgctgagct cccgactggc 120
 tttcgtctgg gacaccgcag cacgtttctt ggagctgcgt aagctgaggt gtcatttctt 180
 caatggggag gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagtctct 240
 gcgcttcgac agcgacgttg gggagtagcg ggcggtgacg gagctggggc ggcctgtcgc 300
 cgagtccttg aacagccaga aggacctcct ggagcagaag cggggccggg tggacaatta 360
 ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag tccatcctca 420
 ggtgactgtg tatcctgcaa agaccagacc cctgcagcac cacaacctcc tggctctgctc 480
 tgtgagtggt ttctatccag gcagcattga agtcagggtg ttccgggaacg gccagggaaga 540
 gaaggctggg gtggtgtcca cgggctgat ccagaatgga gactggacct tccagacctt 600
 ggtgatgcta gaaacagttc ctcgagtgag agagggttac acttgccaag tggagcacc 660
 aagcgtaacg agcgtcttca cagtggaaatg gagagcacgg tctgaatctg cacagagcaa 720
 gatgctgagt ggagtcgggg gctttgtgct gggcctgctc ttccttgggg ccgggctgtt 780
 catctacttc aggaatcaga aaggacactc tggacttcag ccaacaggat tcttgagctg 840
 aagtgcagat gacaatttaa ggaagaatct tctgccccag ctttgcaagg tgaagaagctt 900
 tcccgcctgg ctgttattct tccacgagag agggctttct caggacctag ttgctactgg 960

ttcagcaact	gcagaaaatg	tcctcccttg	tggcttcctc	agttcctgcc	cttggcctga	1020
agtcccagca	ttgatggcag	cgctcatct	tcaacttttg	tgctcccctt	tgctaaacc	1080
ctatggcctc	ctgtgcctct	gtactcacc	tgtaccacaa	acacattaca	ttattaaatg	1140
tttctcaaag	atggagtt					1158

<210> 2802

<211> 3597

<212> DNA

<213> Homo sapiens

<400> 2802

ggcgaatgga	gcagggggcg	gcagataatt	aaagatttac	acacagctgg	aagaaatcat	60
agagaagccg	ggcgtggttg	ctcatgccta	taatcccagc	acttttgagg	gctgaggcgg	120
gcagatcact	tgagatcagg	agttcgagac	cagcctgggtg	ccttggcatc	tccaatggg	180
gtggctttgc	tctgggctcc	tgttccctgt	gagctgcctg	gtcctgctgc	aggtggcaag	240
ctctgggaac	atgaaggtct	tgaggagccc	cacctgcgtc	tccgactaca	tgagcatctc	300
tacttgcgag	tggaagatga	atgggtccac	caattgcagc	accgagctcc	gcctgttgta	360
ccagctgggt	tttctgctct	ccgaagccca	cacgtgtatc	cctgagaaca	acggaggcgc	420
gggggtcggtg	tgccacctgc	tcatggatga	cgtgggtcagt	gcggataact	atacactgga	480
cctgtgggct	gggcagcagc	tgctgtggaa	gggctccttc	aagcccagcg	agcatgtgaa	540
accaggggcc	ccaggaaaacc	tgacagttca	caccaatgtc	tccgacactc	tgctgctgac	600
ctggagcaac	ccgtatcccc	ctgacaatta	cctgtataat	catctcacct	atgcagtcaa	660
catttggagt	gaaaacgacc	cggcagattt	cagaatctat	aacgtgacct	acctagaacc	720
ctccctccgc	atcgcagcca	gcaccctgaa	gtctgggatt	tcctacaggg	cacgggtgag	780
ggcctgggct	cagtgtcata	acaccacctg	gagtgagtgg	agccccagca	ccaagtggca	840
caactcctac	agggagccct	tcgagcagca	cctcctgctg	ggcgtcagcg	tttcttgcct	900
tgatcctcctg	gccgtctgcc	tgttgtgcta	tgtcagcatc	accaagatta	agaaaagaatg	960
gtgggatcag	attcccaacc	cagcccgcag	ccgcctcgtg	gctataataa	tccaggatgc	1020
tcaggggtca	cagtgggaga	agcgggtccc	aggccaggaa	ccagccaagt	gccacactg	1080
gaagaattgt	cttaccaaagc	tcttgccctg	ttttctggag	cacaacatga	aaagggatga	1140
agatcctcac	aaggctgcca	aagagatgcc	tttccagggc	tctggaaaaa	cagcatggtg	1200
cccagtggag	atcagcaaga	cagtcctctg	gccagagagc	atcagcgtgg	tgcatgtgt	1260
ggagtgtgtt	gagggcccg	tggagtgtga	ggaggaggag	gaggtagagg	aagaaaaagg	1320
gagcttctgt	gcatcgccctg	agagcagcag	ggatgacttc	caggagggaa	gggagggcct	1380

tggtgccccg	ctaacagaga	gcctgttctt	ggacctgctc	ggagaggaga	atgggggctt	1440
ttgccagcag	gacatggggg	agtcatgcct	tettccacct	tcgggaagta	cgagtgetca	1500
catgcctcgg	gatgagtctc	caagtgcagg	gcccaggag	gcacctccct	ggggcaagga	1560
gcagcctctc	cacctggagc	caagtccctc	tgccagcccg	acccagagtc	cagacaacct	1620
gacttgacac	gagacgcccc	tcgtcatcgc	aggcaacct	gcttaccgca	gcttcagcaa	1680
ctccctgagc	cagtccacct	gtcccagaga	gctgggtcca	gacctactgc	tggccagaca	1740
cctggaggaa	gtagaacctg	agatgccttg	tgtccccag	ctctctgagc	caacctctgt	1800
gccccaacct	gagccagaaa	cctgggagca	gacctctcgc	cgaaatgtcc	tccagcatgg	1860
ggcagctgca	gccccctctc	cggccccac	cagtggctat	caggagtgtt	tacatgcggt	1920
ggagcagggt	ggcaccacgg	ccagtgcggt	ggtgggcttg	ggtccccag	gagaggctgg	1980
ttacaaggcc	ttctcaagcc	tgcttgccag	cagtgtctgt	tccccagaga	aatgtgggtt	2040
tggggctagc	agtgaggga	aggggtataa	gcctttccaa	gacctcattc	ctggctgccc	2100
tggggacctt	gccccagctc	ctgtccccct	gttcaccttt	ggactggaca	gggagccacc	2160
tcgcagtcgg	cagagctcac	atctcccaag	cagctcccca	gagcacctgg	gtctggagcc	2220
gggggaaaag	gtagaggaca	tgccaaagcc	cccacttccc	caggagcagg	ccacagaccc	2280
ccttgtggac	agcctgggca	gtggcattgt	ctactcagcc	cttacctgcc	acctgtgcgg	2340
ccacctgaaa	cagtgtcatg	gccaggagga	tggtggccag	acccctgtca	tggccagctc	2400
ttgtctgtgg	tgctgtctgt	gagacaggtc	ctcgccccct	acaaccccc	tgagggcccc	2460
agaccctctt	ccaggtgggg	ttccactgga	ggccagctct	tgctccggct	ccctggcacc	2520
ctcgggcctc	tcagagaaga	gtaaatcttc	atcatccttc	catctgccc	ctggcaatgc	2580
tcagagctca	agccagaccc	ccaaaatcgt	gaactttgtc	tccgtgggac	ccacatacat	2640
gagggtctct	taggtgcatg	tcctcttggt	gctgagctct	cagatgagga	ctagggctta	2700
tcctagcctg	ggaaatgcca	cctcctggaa	ggcagccagg	ctggcagatt	tccaaaagac	2760
ttgaagaacc	atgggtatga	gggtattggc	cccactgacg	ttggcctaac	actgggctgc	2820
agagactgga	ccccgcccag	cattgggctg	ggctcgccac	atcccatgag	agtagagggc	2880
actgggtcgc	cgtgccccac	ggcaggcccc	tgaggagaaa	ctgaggccct	tgggcacctc	2940
gacttgtgaa	cgagttgtgt	gctgtccctt	ccacagcttc	tgacagagac	tgctccctgtt	3000
gtaactgccc	aaggcatggt	ttgcccacca	gatcatggcc	cacgtggagg	cccactgcc	3060
tctgtctcac	tgaactagaa	gccgagccta	gaaactaaca	cagccatcaa	gggaatgact	3120
tggggcgctt	tgggaaatcg	atgagaaatt	gaacttcagg	gagggtggtc	attgcttaga	3180
ggtgctcatt	catttaacag	agcttcccta	ggttgatgct	ggaggcagaa	tcccggtggt	3240

caaggggtgt tcagttaagg ggagcaacag aggacatgaa aaatgctat gactaaagca	3300
gggacaattt gctgccaaac acccatgccc agctgtatgg ctgggggctc ctcgtatgca	3360
tggaaacccc agaataaata tgctcagcca cctgtgggc cgggcaatcc agacagcagg	3420
cataaggcac cagttaccct gcatgttggc ccagacctca ggtgctaggg aaggcgggaa	3480
ccttgggttg agtaatgctc gtctgtgtgt tttagtttca tcacctgtta tctgtgtttg	3540
ctgaggagag tggaacagaa ggggtggagt ttgtataaa taaagtttct ttgtctc	3597

<210> 2803
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2803	
ttccccccc ccccccccc ccccgccga gcacaggaca cagctgggtt ctgaagcttc	60
tgagtcttc agcctcacct ctgagaaaa cctcttttcca ccaataccat gaagctctgc	120
gtgactgtcc tgtctctct catgctagta gctgcctct gctctccagc gctctcagca	180
ccaatgggct cagaccctcc caccgectgc tgccttttct acaccgcgag gaagcttct	240
cgcaactttg tggtagatta ctatgagacc agcagcctct gctccagcc agctgtggta	300
ttccaaacca aaagaagcaa gcaagtctgt gctgatccca gtgaatccct ggctccaggag	360
tacgtgtatg acctggaact gaactgagct gctcagagac aggaagtctt caggggaagg	420
cacctgagcc cggatgcttc tccatgagac acatctctc catactcagg actcctctcc	480
gcagttcctg tccctctct taatttaac ttttttatgt gccgtgttat tgtattaggt	540
gtcatttcca ttatttatat tagtttagcc aaaggataag tgcctatgg ggatgggtcca	600
ctgtcactgt ttctctgctg ttgcaaatc atggataaca catttgattc tgtgtgtttt	660
ccataataaa actttaaaa aaaatgcaga cagtta	696

<210> 2804
 <211> 1451
 <212> DNA
 <213> Homo sapiens

<400> 2804	
gaagagcaag cgccatgttg aagccatcat taccattcac atccctctta ttccctgcagc	60
tgccccctgt gggagtgggg ctgaacacga caattctgac gcccaatggg aatgaagaca	120
ccacagctga tttcttctg accactatgc cactgactc cctcagtgtt tccactctgc	180
ccctcccaga ggttcagtgt ttgtgttca atgtcgagta catgaattgc acttggaaaca	240
gcagctctga gccccagcct accaacctca ctctgcatta ttgttacaag aactcggata	300

```

atgataaagt ccagaagtc agccactatc tattctctga agaaatcact tctggctgtc 360
agttgcaaaa aaaggagatc cacctctacc aaacatttgt tgttcagctc caggaccac 420
gggaaccag gagacagcc acacagatgc taaaactgca gaatctggtg atccccctggg 480
ctccagagaa cctaacactt cacaactga gtgaatccca gctagaactg aactggaaca 540
acagattctt gaaccactgt ttggagcact tgggtcagta ccggactgac tgggaccaca 600
gctggactga acaatcagtg gattatagac ataagttctc cttgcctagt gtggatgggc 660
agaaacgcta cacgtttcgt gttcggagcc gctttaaccc actctgtgga agtgctcagc 720
attggagtga atggagccac ccaatccact gggggagcaa tacttcaaaa gagaatcctt 780
tctgtttgc attggaagcc gtggttatct ctgttggtc catgggattg attatcagcc 840
ttctctgtgt gtatttctgg ctggaacgga cgatccccg aattcccacc ctgaagaacc 900
tagaggatct tgttactgaa taccacggga acttttcggc ctggagtggg gtgctetaagg 960
gactggctga gagtctgcag ccagactaca gtgaacgact ctgcctcgtc agtgagattc 1020
ccccaaaagg aggggcccct ggggaggggc ctggggcctc cccatgcaac cagcatagcc 1080
cctactgggc cccccatgt tacacctaa agcctgaaac ctgaaccca atcctctgac 1140
agaagaacc cagggtcctg tagccctaag tggactaac ttctcttcat tcaaccacc 1200
tgctgtcat actcacctca cccactgtg gctgatttgg aattttgtgc ccccatgtaa 1260
gcaccccttc atttggcatt cccacttga gaattaccct ttgccccga acatgttttt 1320
cttctccctc agtctggccc ttctttttcg caggattctt cctccctccc tcttccctc 1380
ccttctctct tccatctacc ctccgattgt tctgaaccg atgagaaata aagtttctgt 1440
tgataatcat c 1451

```

<210> 2805

<211> 1439

<212> DNA

<213> Homo sapiens

<400> 2805

```

taattctctc acattcccat ggaaggtaaa gccatcgca cgtctctcgg tggatgatgt 60
gtattgatat tcccggtgtc tctctcgtct tccttcggtt ttacatcccg gctctctagc 120
ctgcctctaa agcgtgcgtc tatcggtggg gctgtctctt gttccggcgt caatggcttg 180
actcggtgga attccattgt ttcgactcgc cgactcgttc ctgttcgttc aattaactcg 240
gaatcggact cggactccga cttccctcac gagaatcagc agggaaatcc aggtttgggg 300
aaatttaagg aataccaaga atgggactca tggacggcca agttctccgg tggagcaaac 360
attccgttct tcatgtctca attgcctcag atcctcctca ataccagaa tcttttggcg 420

```

ggaacaata cegctctttc ggctgtccca tggctgggaa tgttgactgg tttgttagga 480
 aacctttcgt tgctttctta ttttgctaag aagagagaaa aagaagcagc tgtggtgcaa 540
 aactggggag tggctctac tcacattgtg ctgacacagc tcacaatggc tgaagcaatg 600
 cctattcagt attttgttc tacttcagct gttgtcacca tgggtctcat tgtgaactgt 660
 ttgtactatt tcggtaaagt tagcaaaact ggtgggcaac tggggaaga cgttatcact 720
 attggtggac tctcgttct tctcctcaatc atgtgggtcaa catttgtccc tcttgtacca 780
 aacagtatct tgcctgggac aactgctttt ggtattgctg tggcagctat aatcatggct 840
 cgaactggga aactttcaga gaaagggtgtt aggtttgtag ggtctttatc tggatggaca 900
 gcaactctta tgttatcgtg gatgccagtt tcccaaatgt ggacaaatct tctaaccctg 960
 gacaacataa aaggcttacc gtcaatcaca atgttgctct cgatgatggg aaacgggctt 1020
 atgatccctc gagcactatt tatccgtgat ttgatgtggc tcaactggtc gctatgggca 1080
 actctctttt atggatatgg aaatatctct tgcctatacc tggtaaatg caccagccag 1140
 tcattcttcg tggcagctac aattgggttg atctcatgga taggactggc tttgtggaga 1200
 gatgcagtgg cttatgggtc caactcgccg tttagatctt tgaaagaact tgtttttgga 1260
 ccgtaatgaa tgaatgtaca cgccataaac gccctttgtt caagcaagtc catagagatt 1320
 acatgtattt tcattctttt ttctaaggg ttataagaca actactctgt aatttcattg 1380
 atttttttac ttgaatcata tagtaaaata atgtctgata tcaaaaaaaaa aaaaaaaaaa 1439

<210> 2806

<211> 954

<212> DNA

<213> Homo sapiens

<400> 2806

ggacagagc ggttgacac ttttttaaaa aaagtaaatg gatttgccac aattaatgt 60
 cataacattt atgacagaat ataaaatatt aacatatctt aagccaagtt ttaggtgtat 120
 tttttgaatc ttggttataa acccaatttt aaagggcgat gtatccagcg ttgtgaaggc 180
 aacagagtgt acccatattt atatttttat aaaataccta taagactgtg aatctcttgt 240
 gctaattggc gagttaattg aaggatcggt ttgccccttt ttagcctccc agagcttega 300
 ggactcaatt cgaacccgaa atctcgccgt gggggagggt ttgcgtcgag acctgggccc 360
 ggggagggtc tctgcgtca ctttctgtcc tgaaaggcgc ctttccttgt ttctgtggct 420
 ccaattttct atgcagcccc acacccttg ttgttttgat cctgagaaat aaaaggaggg 480
 ctgaattatt caaattaaaa tgaggtttcc ccttcattgga agtgetgctg acccttcgtg 540
 cagaaatggg gagcacttga ggacacaggt ggggtggaggc ctttgtgtcg tggctggctg 600

tattcgggca gccctccgtc gctttttata aaactttgtg tgagaagaat atattgataa	660
tgtcagtgaa acaagcagac attgaaatgg aggcacagat tactccacaa ggagttcttc	720
tgtatatttt ttctagatgc aaataccttt ttaattatgt taattaatgt taagactttc	780
taggcttata tcgaagctgt gtgtgggtca cggggtgatc actgctaact ggataaagtt	840
tgtagcagcac attcctgagt gtacgatatt gacctgtagc ccagcgtgaa aaatttataa	900
ataaattttt cattgatctt tttatattaa aaaaaaaaaa aaaaaaaaaa gttg	954

<210> 2807

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2807

atggaggctg aagctgctgt tcggaggccc tctattggtg cctctctect gccgtcatca	60
ctatggcagg aaaacagaga tggtttagta atgaattatc attcccaaac ccgtgtccac	120
ctggaacatc aggatgggac catgtttgaa aatcgggtct ttccaaatgt aattaagtaa	180
ggcgaggcca tactgcattt acaatgggcc caatccagtg tccctatgag agacggaaga	240
ggagacacag acacaaagca ggaggccaca taaagacaga ggcagagact gaagtgtatc	300
tgccccaagc ccaggggatg cctggagtcc ccaggagctg ggagaggcag gaagggagccc	360
tcccttagag tctcttgagg ggaactgata caattgcaga gtgcactaaa cagttgcccc	420
aaaagacata tcttgtttta aggccagac ctgaaattt	459

<210> 2808

<211> 553

<212> DNA

<213> Homo sapiens

<400> 2808

acaacatggt ctccacatgg ctggctggct ggctgtccct gtgtgtgtgt gacacacggt	60
gtgagtgcag ggctgtgcgt gtgtgggagg gtgtctatgt ggcactgact gtcttagctc	120
agagctgggt gatcctctcc atggacaatg acactttaag gattgtcttg gtttgttttt	180
cctatttctg gggatttttc cccctcaggc tcctgggtct gctgtgcct caaggtgtcc	240
tgaccttgag gctgatgagg ggacccctgc ctgtttcccc catactgagt tctagggagg	300
tgctcacccc agactcttag gaaggggtcta gagaaatgag aggagcccaa gccaggggcc	360
agctccgaga aagggaaccc tccacgcttc tctctcccaa attggaaatg aagacaggtt	420
ttcaaaggca caggctcccc ctgccagctt ctaggatctt ccttgggtgt caatgggcca	480
gttaggggta ggcagcttgc acccagttct cctttatctc aacttattgt cctggggaga	540
ggtgctagag gga	553

<210> 2809
 <211> 4628
 <212> DNA
 <213> Homo sapiens

<400> 2809
 gagcagaccc cgaagcccc atcctggacc tggacctca cctgcccttg ctgtgcttca 60
 ggccctgagaa ggtgctacag atcctgacat gcacccctgac ggaacagcgg atcgtcttct 120
 tctcctcgga ctgggctctg ctgacgctgg tcaactgagt cttcatggcc tacctgtatc 180
 cgctgcagtg gcagcaccac ttcgtgccca tctgtgcgga ccagatgctg gatttcgtca 240
 tggccccac gtccctctctg atgggctgcc atctcgacca ctctgaagaa gtcagcaagg 300
 aagccgacgg tttagtcttg ataaatattg atcatgggag catcacctac tccaagtcca 360
 cggacgataa cgtggacatt cctgatgtcc cctcctggc agcccagacg tttattcaga 420
 ggggtgcagag cctccagctc caccatgagc tgcacgccc ccacctctc tccagcacag 480
 acctgaagga gggccgagcc caccggcggc cctggcgaca gaaactcaac tggcagatac 540
 agcagaccac cctgcagctg ctctgagca tcttcaggga tgtaagaat catttaaac 600
 atgaacacag agtctttaat agtgaagaat ttctcaaaac cagggctcca ggggaccatc 660
 agttttataa gcaggctcta gacacctaca tgttccattc ttttcttaaa gcccggtcca 720
 ataggaggat ggacgccttt gctcagatgg acctcgacac ccagtcggag gaggacagaa 780
 taaatggaat gcttctaagt ccaaggagac cgaccgttga gaaaagagcc tcccgaagt 840
 cctcgacact gcattgcacc cacagcgca tgggtgctag catgcccac ctgcaggaca 900
 ttgccatgac tgagctggca ccaggaact cctcgctccg gctgacggac accgcaggct 960
 gttagggcag cagcgcagtt ctgaatgtca cgccgaagtc ccgtataca ttcaagattc 1020
 ccgaaatcca ctttcgctg gagagcaagt gcgtcagggc ataccatgcc cactttgtct 1080
 ccatgctgag cgaggccatt tgctttctgg ccccgataa ctctctgctc ctggcccgtc 1140
 atttgtacct ccgagggtc gtttatctga tgcagggaca gctgtgaac gccctcttgg 1200
 acttcagaa tctgtataaa acagacatac ggatcttcc cactgatttg gtgaagagga 1260
 cgggtgaatc catgtctgcc cctgagtggg agggggctga gcaggcgccg gagctgatga 1320
 ggctcatcag cgagatcctg gacaagccgc acgaggcctc gaagctggac gaccacgtga 1380
 agaagtcaaa gctgcccaag aagcacatgc agctggcgga ctcatgaag cgggtccagg 1440
 agtcagggat cgtgaaggac gccagcatca tacaccggct gttcagggcc ttgactgtag 1500
 gacaggagaa acaaatcgac ccagaaacat tcaaagattt ctacaactgc tggaggaga 1560
 cggaagcaga agcccaggag gtcagtctgc cgtggctggg gatggaacac ctggataaaa 1620

acgagtgtgt gtgtaagttg tccagctccg tcaagacaaa ctagggcgtt ggcaagatcg 1680
 ccatgaccca gaagcgcttg ttctccttaa ccgaaggaag gccaggctac ttggagattt 1740
 ccaccttcag aaatatagag gaggtcagga gaaccactac tacattttcta cttcggagaa 1800
 taccactttt aaaaatcaga gtggcggtcca agaaagaagt cttcgaagcc aacctgaaaa 1860
 ccgagtgtga cctttggcac ctgatgggtga aggagatgtg ggctgggaag aagctggccg 1920
 atgaccacaa ggaccctcac tacgtccagc aggcgctgac caactcttg ctgatggacg 1980
 ccgtcgtggg cacctgcagc tcaccaggcg ccattctacg tgcctccaag ttatcctact 2040
 ttgataagat gagtaacgaa atgcccatga cgcttcaggga gacaaccctg gaaacactga 2100
 agcataaaat caaccctcgt gcgggggagg cgctccaca agcgggtggac gtgctgtctt 2160
 acactccagg gcattctgac ccagccgaaa aagttgaaga tgctcaccct aagttatggt 2220
 gtgctctgag cgaaggcaag gtgaccgtgt tcaatgcttc ttcattggacc atccaccagc 2280
 actcctttaa agtgggcact gcaaaagtga actgcattgt gatggccgac cagaaccagg 2340
 tgtgggttgg ctcggaagac tccgtcatct acatcatcaa cgccacacgc atgtcctgca 2400
 acaagcagct cacagcccac tgctccagtg tcacggattt gattgtgcag gacggacagg 2460
 aggcaccacg caacgtgtac tcgtgcagca tggacggcat ggtgtggtg tggaaatgtga 2520
 gcacactgca ggtgaccagc cgcttcacgc tgccgcgagg tggcctgacg tccatcagac 2580
 tgcacggcgg ccgcctgtggt tgctgcacag gtaacagcat catggtcatg aaaatgaatg 2640
 gatccctcca tcaagaattg aagattgagg agaacttcaa agacaccagt acctccttcc 2700
 tggccttcca gctccttctt gaggaggagc agctgtgggc ggctgtgca ggacgcagcg 2760
 aggtttacat ctggagcctg aaggacctgg cccagccccc gcagagggtg cccctcgagg 2820
 actgctctga gatcaactgc atgatccggg tgaagaagca ggtctgggtg ggcagccgag 2880
 ggctggggca gggaacaccc aaggggaaaa tctactgtat tgacgccgag aggaagaccg 2940
 tggagaagga gctggtggcg cacatggaca ccgtgaggac gctgtgctcg gctgaggaca 3000
 gatacgtgct gagtgggtcg ggcaggaggg aggggaaagt cgccatttgg aaaggcgaat 3060
 aaacgtggct gagtctgcca agtggaaactg tgccctatgt gtggggactg gctgccctct 3120
 agagcctgcc aggagcagaa gcctggaggg gtggcagggc agagcagccc aggctcagca 3180
 tggagccccc ttaccgtgtg gccagccgcg agaccctagg ccacgcacct tctctcaggc 3240
 cttcggggccc cctgggttaa ctgcaccaag ggtgtttcct gttgggggtg gtctcaggca 3300
 ggcagctgcg tcttgttggg gataacctct gctgggagggt tactttgttg cctagaaagt 3360
 tctggaatcc acaaccaggg gctggcactg gagccagcag ctggcccgag tcacagggtga 3420

cccggtggccc	tcacgtctct	ggttttacct	ttccttactt	cattcattca	ctcaccacgt	3480
ccttacgaat	caccgaggaa	cactgggctg	agcacatgac	agggagcctg	gagccccggg	3540
gcctccagcg	aggcctgaga	agggtgggtc	gggtaaccac	tgtgggctct	ctccccatcac	3600
agaaggtgga	cagggcctac	ccaggtggag	gggaccaccc	tgcatcagg	tgtttgcgac	3660
aggggttggg	ccagctgagg	caagctgtct	tttttccctt	ttctttttaa	tagatgcaac	3720
atttttataa	taatcctaga	gacctttttt	ctaccaaaaga	tcacagacca	gaaaaagtgc	3780
catctaaaat	atcatgccca	ggaaagcaca	tgggatcaaa	agtaaaatag	catcatgtgt	3840
gatctcgtct	tccagcgtgc	cgctcagttc	cccgaaatccg	tgtgcacacg	tgtgatctcg	3900
tcttcagtgt	gccgctcagt	tccttgaatc	cgtgtgcaca	ctgcgtatgt	gtacgcgcag	3960
catgtctatac	tgaactcaac	aagatcttgg	ctgtacataa	atattttaa	aagagaccct	4020
ttgcaccttt	ttactgtcat	gttgagactt	cattacttaa	atgttctacg	gaaggttctg	4080
gtgtggttgt	tggagccgga	gggagcgtgt	cagcacgtgc	tgagggcag	gggcctgccc	4140
cctgggcacc	catccacaag	ctgggccacg	gagctccagc	ttctcaggac	aaagccccgg	4200
ggctggcgca	tcctgagggg	ctctgggggt	gtttgccagg	ctcctgggat	gggcgctttt	4260
cagaagccct	gcagtgcctc	cagatggaaa	ggcggggccc	gcctccggtt	gggtctgcac	4320
tttgagaggt	ccacaccacg	gaccagggtt	tcctcccaag	cttggtcttg	tgtactgtact	4380
aacttcttgg	ggcattctga	gagtgtgggc	agagagaatt	atgtggcctc	atcctcccc	4440
aaggctgtgc	ttgcagcccc	ggcaccttcc	cactttctag	ctctggagag	gttggtattt	4500
gctttttaa	acacatgaat	ccttatgata	aaagtctgtc	agtcaaaaat	acatttataa	4560
attatttaat	gccagtcctc	atgtaacctc	aggtatcttc	agcttgtgga	gaataaatct	4620
ggtttaat						4628

<210> 2810

<211> 1245

<212> DNA

<213> Homo sapiens

<400> 2810

ggcacgaggc	aggcgctgac	gaggagcccc	gctgaggag	gatgcgccgc	tgacgcctgc	60
gggagccgcg	cgcctggggc	gggaggatgc	tccagagggg	cctctggccg	tggcgcacgc	120
ggctgtgtgc	gacccctggc	acctggcgcc	cagcgccgcc	gtggccgctg	ccgcctccgc	180
cccaggtttt	gcgtgtgaag	ctgtgtggaa	atgtgaaata	ctaccagtca	caccattata	240
gtaccgtggt	gccacctgat	gaaataacag	ttatttatag	acatggcctt	cccttggtaa	300
cacttacctt	gccatctaga	aaagaacgtt	gtcaattcgt	agtcaaacca	atgtgtgcaa	360

cgattggttc attccttcag gacctacaaa atgaagataa gggatcaaaa actgcagcca	420
tcttcacagc agatggcaac atgatttcag cttctacctt gatggatatt ttgctaataa	480
atgattttaa acttgctatt aataaaatag catatgatgt gcagtgtcca aagagagaaa	540
aaccaagtaa tgagcacact gctgagatgg aacacatgaa atccttgggt cacagactat	600
ttacaatctt gcatttagaa gagtctcaga aaaagagaga gcaccattta ctggagaaaa	660
ttgaccacct gaaggaacag ctgcagcccc ttgaacaggt gaaagctgga atagaagctc	720
attcggaagc caaaaccagt ggactcctgt gggctggatt ggcactgctg tccattcagg	780
gtggggcact ggcctggctc acgtggtggg tgtactcctg ggatatcatg gagccagtta	840
catacttcat cacatttgca aattctatgg tcttttttgc atactttata gtcactcgac	900
aggattatata ttactcagct gtaagagta ggcaatttct tcagttcttc cacaagaaat	960
caaagcaaca gcactttgat gtgcagcaat acaacaagtt aaaagaagac ctgctaagg	1020
ctaaagaatc cctgaacag gcgcgtcatt ctctctgttt gcaaatgcaa gtagaagaac	1080
tcaatgaaaa gaattaatct tcaggtttta aatgtcgtca gattttccat tatgtattga	1140
ttttgcaact taggatgttt ttgagtccta tggttcattt tgattgttta atctttgtta	1200
ttaaattctt gtaaacagaa aaaaaaaaaa aaaaaaaa aaaaa	1245

<210> 2811

<211> 3780

<212> DNA

<213> Homo sapiens

<400> 2811

tactggacaa acatttcctc caaggacaca gctctctgcc tccatgtcac cacctttgaa	60
ggactgactg attccctcgg ctggtgccag tgectgtctc tgccatgggg cccgcgggga	120
gcctgtctgg cagcggacag atgcagatca cctgtggggg aagtctgcca gctgtcgcca	180
ttttctctgt catcaccttc ctcatcttcc cgtgctctag ttgtgacagg gaaaagaagc	240
cgcgacagca tagtggggac catgagaacc tgatgaacgt gccttcagac aaggagatgt	300
tcagccgttc agttactagc ctggcaacag atgctcctgc cagcagttag cagaatgggg	360
cactcaccaa tggggacatt ctttcagagg acagtactct gacctgcatg cagcattacg	420
aggaagtcca gacatcggtc tcggatctgc tggattccca ggacagcaca gggaaaccaa	480
aatgtcatca gagtcgggag ctgcccagaa tcctctccga gagcgcagtg gataccatgc	540
tcacggcgag aagtgtggac ggggaccagg ggctggggat ggaagggccc tatgaagtgc	600
tcaaggacag ctctctccaa gaaaacatgg tggaggactg cttgtatgaa actgtgaagg	660
agatcaagga ggtggctgca gctgcacacc tggagaaaag ccacagtggc aaggcaaaat	720

ctactctctgc ctcgaaagag ctcccagggc cccagactga aggcaaagct gagtttgctg	780
aatatgcctc ggtggacaga aacaaaaaat gtcgtcaaaag tgttaatgta gagagtatcc	840
ttggaaatcc atgtgatcca gaagaggagg ccccaccacc tgtccctggt aagcttcttg	900
acgagaatga aaaccttcag gagaaggaag ggggagaggc ggaagagagt gccacagaca	960
cgaccagtga aactaacaag agatttagct cattgtcata caagtctcgg gaagaagacc	1020
ccactctcac agaagaagag atctcagcta tgtactcatc agtaataaaa cctggacagt	1080
tagtgaataa atcggggcag tcgcttacag ttccggagtc cacctacacc tccattcaag	1140
gggaccacaca gaggtcacc cctcctctgta atgatctcta tgctactggt aaagacttcg	1200
aaaaaactcc aaacagcaca ctccaccag caggggaggc cagcgaggag ccagagcctg	1260
attatgaagc gatacagact ctcaacagag aggaagaaaa ggccaccctg gggaccaatg	1320
gccaccacgg tctcgtccca aaggagaacg actacgagag cataagtgc ttgcagcaag	1380
gcagagatat taccaggctc tagcaaccca gaagacaacc ctgggtagcc tgtgatcagt	1440
gtctggagac gtttctcttg tggaagagaa gaagtgcac aaacctatac ttcatatgct	1500
gcttttagtca cctgaagatg gttggagagg cctgtctgac tgttctccca gttgttcagt	1560
ttctgagaca gagaggtagc gactaggctg cactgagtg tgcccctgcc tgccagatgg	1620
acaggtagac ccaagcacat ctccctgctg caccctcacc acccacaana gatcccagct	1680
gtcagtggtc tcatctcatt agtgaggaaa gccaaagtgt atggaaaagc tgcactcacc	1740
aaggaccaca atgcccccg cctaaaagtag tgccattcag aaaagcagggt ttttcttcct	1800
ctctttcctt ttctctgtct gctactgact ttaaggcttt tcccccttg aaatgtccag	1860
attcctgtgg ttcattccaa ggaaattttc acacaaagct tggcctttgc cctcaatata	1920
gggtgttttag gatgggtgaca aacctgggt gctgctttct gccagctcg ccagctctcc	1980
ccaaagagtt gcgcatcagc acctggggat ctggaccctg cgggtgaagg gatggggagg	2040
gacgtccctg gagtctcttc tgtctttggt cctctctatt ttggcattcg atatcagcag	2100
cctctcccca aagtacttga agtcagtttt agatgcttta ttttatTTTT ctagtcaaaa	2160
acgtgtttcc ccagtggtt gaaaactcgt ccgaatcttt tcagtatttt ccatgagtat	2220
tggtgtactt ctgacttgt ttaagcccag aactcattcc ttcaaaaacag agagccttaa	2280
tctttatggt gggacacaga ccacatattt ggacgacagc catgcatcca tctgtgaagg	2340
gctgtggaca tgaatgtgta tttcccatgg tctccgctgc ccacaccaac agtgtggcat	2400
ctcataagtt aactgctacc ctaaggtaat ctaagattaa aatgtaaaca tttatttttg	2460
ttatgtaagt ttataagatg ttttatgttc aatgcctaat ttctcaaaag tgccagaaaa	2520
aaatgtatat tagctatttt gatatttatgt acaatgattt atactctcct tttgaaaaga	2580

taccataaag cacataagct agatcactac aaggagctgt tatctttttt ctaatcaagt 2640
 gtttaaaaca ctgatgggtt ttaaagactc acctttttta atggtacttg gagctcctga 2700
 ttcaaattac ctagaccccc tagagaaata aatggaatat acataaataa tcatttttcag 2760
 tgggttatgg tgggcaatat tgcaatat t gaaatggtaa aaatggaaag aagaacaaaa 2820
 tatgatgaga ggtggctgtg aattataaac ctcatataag tgtcataatt ccattaaggt 2880
 ttaattatat tttttcagaa aacagtgatg aattctgtag tccagtgcct gccaatgcaa 2940
 attgcctatt ggaatctctt tcctatat ttt tacaacatc agtggctgaa atagctcaga 3000
 gtaagagctc agcctgggtt gaatttaac atctctttg atcttataag gccagcatta 3060
 ggaaacttgt tcacttttca ttttcaaagg agcctagtgt aagtgcctatt atgagtgtgg 3120
 gctatggaaa gacagctttt cctcactga taaagaaaaa aaatgaggaa attatttcat 3180
 cccctgtgta catctgtgac tttttgatt taataatctt gctgtttttc ctctttatga 3240
 caaagaatat aattgggagg atgaagtgtc ttaaaaattg tagagaccag ctactgggaa 3300
 tgtttttcca tccctgtatt catggcttga ctttgtgact gctctacact gcattgtcga 3360
 cattgcagag tgagctatgt tgaggtaaac tgggtgggtg tcattatttt gcaatcagcc 3420
 tggctctctc catgaagatg tcgtgtgcat aagcacaac atcactgatt agaagatcac 3480
 agcagaatac ccttgattga gagagaagtt cgtaccctgc atttctctga attctagtct 3540
 ctcataagca ctgctttgct ggatgatttt cactgctttg tgttaatgac tttagcgat 3600
 ctctcacatg atggggttct ttagtacatg gtaacagcca tgtcatctta cacacctagc 3660
 atttgtaatg ctgtagtgac atcctttata ggcaccttac agctcaaaac ttttgtttca 3720
 tttcatgcct tacttatcaa aaaggcagga aagtaggtat gatctctaaa gtaaaaaaaa 3780

<210> 2812

<211> 2176

<212> DNA

<213> Homo sapiens

<400> 2812

aaaaatgcaa tgattattga tatctagggtg acctgaaaaa aaatagttaa tgtgctttgt 60
 aaactgtaaa gcacttgat tctactgtga taagcgttgt ggatacaaaag aaaggagcaa 120
 gcataaaaaa gtgctctttc aaaaggatat agtactatgc agacacaagg aattgtttga 180
 taaatgaata aattatatgt atatttgagg ccaattttgt tttgtgctc tggtaatttt 240
 gagtaaaaaa gcagtatccc aggtatcaga aacgaaaaca catggaaact gcttttaaac 300
 tttaaaaata actgaaaaca taagggacta agcttgttgt ggtcacctat aatgtgccag 360
 ataccatgct ggggtctaga gctaccaaag ggggaaaagt attctcatag aacaaaaaat 420

ttcagaaagg tgcataat	aa agtgctt	gtg aactaaagc atgatacaaa	tg tcaatggg	480	
ctacatat	tt atgaatgaat gaatggatga	atgaatatta agtgcctctt	acataaccagc	540	
tattttgggt	actgtaaaaa acaagattaa	ttctcctatg taataagagg	aaagtttatt	600	
ctctatacta	ttcagatgta aggaatgata	tattgcttaa ttttaacaa	tcaagacttt	660	
actggtgagg	ttaagttaaa ttattactga	tacatttttc caggtaacca	gaaaagagct	720	
agtatgagga	aatgaagtaa tagatgtgag	atccagaccg aaagtcactt	aattcagctt	780	
gcgaatgtgc	tttctaattt ataaagcact	tgtaaatgaa aaatttgatg	ctttctgtat	840	
gaataaaact	ttctgtaagc taggtattgt	ctctacaaaa ttctcattgt	atagttaaac	900	
cacagtgaga	agggttctat aagtagttat	acaaaccaag ggtttaaata	cctgttaaat	960	
agatcaattt	tgattgccta ctatgtgaac	tcactgttaa aggcactgaa	aatttatcat	1020	
atttcattta	gccacagcca aaaataaggc	aatacctatg ttagcatttt	gtgaactcta	1080	
aggcaccata	taaatgtaac tgttgatttt	ctcacttggg gctgggtact	aggtttataa	1140	
aattgtatga	tagttattat attgtgcaaa	taaagtagga aaatttgaat	aacaatgatt	1200	
atcttttgaa	tacgcatacg caaggggattg	gttgtctgaa gaatgccact	atagtagtta	1260	
tctattgtgt	gccaatctca ttgctaggca	ttggggatgc aaagataaac	catctttatt	1320	
gtgtcttggg	tagcagaaga aaatatgtgt	aaaatcaatt tataatttgt	aaactgccac	1380	
ccatatataa	gctatatctg ctgaatgatc	attgattact cttatcctta	gagataacaa	1440	
ctggggggc	aacattttat tatcattatt	gaacctacaa cagagatcta	tgtgtagatt	1500	
tacgaagcct	acagttctat acagatagga	atgaactatt ggcttactga	atgggtgatta	1560	
ctttctgtgg	ggctcgggac tacatgccct	aggatataaa aatgatgtta	tcattataga	1620	
gtgtctcacg	aaggaaatga agtaatatag	gtgtgagatc cagacccaaa	gtcatttaac	1680	
aagttttatc	agtgatgaaa acatggggaca	aatggactaa tataaggcag	gtactaagc	1740	
tgagtagaga	gataaagtc	tgtccagaag atacatgctt	cctggcctga	ttgaggagat	1800
ggaaaaat	ttt tgcaaaaaa	aagggtgtgt ggtcttccat	ccagtttctt	aagtgtgat	1860
gataaaagtg	aattagacc	accttgacct ggcctacaga	agtaaggag	taaaaataa	1920
tgctcaggc	gtgctttttg attcatttga	taaacaaagc atcttttatg	tggaaatatac	1980	
cattctgggt	cctgaggata agagagatga	gggcattaga tcactgacag	ctgaagatag	2040	
aagaacatct	ttggtttgat tgtttaaata	atatttcaat gcctattctc	tgaagggtac	2100	
tatgttttgt	aaattaataa ggtctggccc	agaagacc	ctcaattgcc	tttgagatta	2160
aaaaaaaa	aaaaaa			2176	

<210> 2813
 <211> 580
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, t or u

<400> 2813
 nccttttgcc catgttgtct ggaatgcctt tcttctcctt ctgttttaca tcaagcatca 60
 gactgaatat ccctcttgtg cggccttcta aaacctcccg tccaaagcga aatatattgc 120
 cctctattta tacttttaca gcatttgga cacaagtaca gagtagtagc tttttatcac 180
 attctctgat aattatatag atatggtatt tcttagctct ctctccaact ggctaataag 240
 ttgctttttg tctgagtgcc taattttgtg ttttgtgtct gaggcctca gtctctcaaa 300
 aaaagggttt ttgattagtt cattattcat ttgaacatgg aaattatgct cactagtggc 360
 aaatgccact aaccgtattc cagaagctag gtgtcatgtt tgcaataaga tatattatcc 420
 cttctacaag tcacctttta ttccaggcat ttgtaaatgc ccattaataa agtaggttcc 480
 ataaatttta ccttgtaagt gcctaagaaa tgagactaca agctccattt cagcaggaca 540
 caataaatat tattttataa tgccgaaaaa aaaaaaaaaa 580

<210> 2814
 <211> 5426
 <212> DNA
 <213> Homo sapiens

<400> 2814
 gggggggaag aaaggcgaag gcaagggcaa ggggtggaga gtgatatgaa gagcgagaga 60
 aaagagagga cagcggacga gcagatccgg tatctggaat cccggcgctt agaactgtgt 120
 ttccgggaga gcaaaaggct tgtctacggc aggtggggga tatagcctct ccttccgatg 180
 aaaagagaaa ggaagaatgg actacagcca ccaaactgcc ctagtcccat gtggacaaga 240
 taaatacatt tccaaaaatg aacttctctt gcactctgaag acctacaact tgtactatga 300
 aggccagaat ttacagctcc ggcaccggga ggaagaagac gagttcattg tggaggggct 360
 cctgaacatc tcttggggcc tgcgcgggcc cattcgctct cagatgcagg atgacaacga 420
 acgcattcga cccctccat cctcctcctc ctggcactct ggctgtaacc tggggggctca 480
 gggaaccact ctgaagcccc tgactgtgcc caaagttcag atctcagagg tggatgcccc 540
 gccggagggt gaccagatgc caagctccac agactccagg ggctgaage ccctgcagga 600
 ggacacccca cagctgatgc gcacacgcag tgatgttggg gtgcgtcgcc gtggcaatgt 660

gaggacgcct agtgaccagc ggcgaatcag acgccaccgc ttctccatca acggccattt	720
ctacaacccat aagacatccg tgttcacacc agcctatggc tctgtcacca acgtccgcct	780
caacagcacc atgaccaccc cacaggctct gaagctgctg ctcaacaaat ttaagattga	840
gaattcagca gaggagtgtt cctgttacgt ggtccatacg agtggtaga aacagaagct	900
gaaggccacc gattacccgc tgattgcccg aatcctccag ggcccatgtg agcagatctc	960
caaatgttc ctaatggaga aggaccagggt ggaggaaagc acctacgacg tggcccagta	1020
tataaagttc gagatgccgg tacttaaaag cttcattcag aagctccagg aggaagaaga	1080
tcgggaagta aagaagctga tgcgcaagta caccgtgctc cggctaataa ttgcacagag	1140
gctggaggag atagccgaga ccccgcaac aatctgagcc atgagaacga ggggatctgg	1200
gcaccccgagg aaccgccatt gcccataaga ccccgaggaa gctaggcact ttctttccat	1260
ggaaacattt agacacaaac ctcccagct ccggccaagc catcatttgc tacctggagc	1320
tggatgtaga agtcagcaga cagctcccta tcctggacc cctgcccctc tttttctgc	1380
tcacaaggac ttttgatttt agttataagg aggacccaaa atgtgtgtgt gtacatgtgt	1440
gtgcacacat ggtacgtgtc catgtgccta cctgatactt tcacatgtaa ttaaatcca	1500
ggcaaccagc acaagagcgc tgagcttggc acatgtgctg ctgctgagca ggaatacag	1560
aggagccact gatctgagtg gtatttaggt tgaaggaaa atttctctc tcaagtcca	1620
gggagcagcc acacgtctgt ctgtgttag agagggaaga gggttctcca ggttcacat	1680
ttgggtgttt tatatgttg tagaaattct cctgtatgc ctagaaggat cagtgaatgt	1740
aagagccttg gaaattaaca aaataacagc cacataacct tgcggcaagt ctgatggaaa	1800
gaaaaagata aaccatccgt ggggtagatg caataagccc acgtattttt acactggaaa	1860
cgttgattgt tttaaatgac aaagacatat gtgatgttct atgtggaaac ctgtgaagag	1920
tggattctgc ctccatctct gcctccatgg ctacccttag gagacagaga agatcctgtg	1980
tgtttctctg taccagctg acagcctgtc tctatggcgc ttctctgagt ggaaggaaat	2040
gtctcaagaa acaaatgatc cgctggtgag tacacagtc tgaccagcta gtgtggccag	2100
ggcctggtgg cctggtggcc aggaagtttc aggttgaagg gaaatgtcga ggctacctgc	2160
agatatgaca ggtgccttga acgcagccca tcttcagtc atcaaagtc ttctgcact	2220
tgaagctggg gcgatgttg cagtcagac cattctttcc aacctctggg ttcttgcaag	2280
ttgccctcac cttgtgtgtg gagatgcatt ccaagaatga agcctcatct tgctactgag	2340
tgtgggggtc agggaaagtc tttaggccac ctgggtgaag tgcatgggga ggaaggagct	2400
tctcctcagc tcctctgagc agccacctat gtgatcttta aatccaaccc caatgggaga	2460

aaagggcaag aacagctctgt gccctgggac tcctatcagg aagcttgaca ggcagctggg	2520
catcagtgca gctgatatcg tttagaggagg gagacagatg cttggacctg ggtgcctggc	2580
tatggagatt gaccaagcaa gatcaggagc tcctgatagc aggcgtcttt gaggcctagct	2640
ggggtagagg cactgcccat ctctctctcca cctctctccc acagaatggt tgcagagctg	2700
ggcagttgag gaaaggacag ccctcggttg gtgcctccaa aggaagggtg acttttttgg	2760
tggagacgtt tctgccctgg gcacctctct gcccccgatt catacctatg gcttcttgag	2820
aaggctcaca gctgtggtct taacgtagac tgcagaaaaga tggcatcgcg cccctggcat	2880
ttcgccaagg gttttatagc aagtctcctt cctccatagg gacagcagca ccagccctgt	2940
ggggcatgga gtggaagccc agaagggtt ctgcaagctg cacagaactg gggtaagaag	3000
acaaagagta gccaccggga gaggcttctt ttgttacagc tgggaaagaa cagtctctgtg	3060
aatgcaaaca cctcctgagt ttgtcaattg agaaaatgat ttggagaact tctcttctgtg	3120
taatttttat ttgtaatgtt cagggcctta gttggcccca gtaattctcc ttggaggact	3180
tgggagaaga atttccacaa agcaaaactac taaccactag ctcttactgg acacgatttt	3240
ctggcttata agagtctctt ttgatttgca ctagcactac gatagtgtta gatggggaaa	3300
tactgcaaca tgtccagttg gccagatcac tttccaaggg agcgatacta aggcagactc	3360
agctttttta agatgggagg tcaggagggtg gaagtggag gagatcccat ctcacacaac	3420
acacttccac gtaatgcaga ccacactttt ccattttgtc ctgccctctt gagaggctcat	3480
ttctcagctc ctaagaacct gatcagaaat ttggaaggg ttctttgaaa tagcagcagt	3540
tgaacagag acactttgcc acagtgtgga gcagatttct tcaactggtat cacatggtct	3600
tgcagttttg aactcttcga ccgattttgt ggagtttatg taattgcgtg caatgaacct	3660
gaaattgtgt aaaggacaaa agaccagttt ataggggttg gttttttttc caacttgtga	3720
aaagcagttt agctgcacat gtctccccac cacccccacc ccgggagggg cttatgttac	3780
aagtgatca agtgaaggaa aaacctgagc ctatctggct gggatggttg aattaagcac	3840
aaggtcacat tctctgtgat cacatgagag ggaagggtgat gacttaaatg gcaggggggtg	3900
gggattatct tggggagagg ctgaaaagca caaaagatag tcttccctgt acgtattggt	3960
gaagaacgtg cacaaggctg gatggacttc aactggagt tgagttgagg caagaggatt	4020
tctggatatt agtcacccat ctgcaagaaa aatgctgagg cctcgggtca agattttgat	4080
ctgagacatg ctgatgcttc aaggagaaat attttcacaa tcctctcttc cctcaccaga	4140
agagaacagt actctctctt agaaacctct aggtaaacac attttatcct aatatcggtg	4200
gcataataat ccccccccaa aatatctgtt ttecatgcaa aaaagtctca acaagaagtc	4260
tgtggagttg agtggttact tcaaagtgtc aggagagtga agaaattggc cacagaagag	4320

caagaagctc tcttaagaaa agggaattct ctttaagaa accaccacca acaacaaaac 4380
 aacaaaaaac catgttttat gtcaaagctc ttagcacagc agaatgtggt gtcacagata 4440
 catcgccgag agaggtttct tctcttcttt tttttttttt tgagacagag tctggttctg 4500
 ttcccaggc tggagtgcag tgggtggatc tcagctcact gcaacatccg cctctggggt 4560
 tcaagtgtt ctcctgtctc agcctcccaa gtagctggaa ttacagggac ccgccaccac 4620
 gcccgctaa tttttttgtg tggttttagt agaggtgggg ttccaccatc ttggccaggc 4680
 tgggtctgaa ctctgtacct cgtgatccac ccgcctaggc ctcccaaagt gttgggatta 4740
 caggcgtgag ccactgtgcc cagccaaaag agaaattctt acatgaacaa ggcaatttca 4800
 gtgtcttaca gcggccaaac catgacgtga agaattgagat aggagacagg agatcaccat 4860
 aagcgtccct gatatagcag cacacatttt cactgtttcca cttaaatcgt tttgcacaaa 4920
 gtcttgcttc gctcagatga gatgagatat gatttcttag agatgtaaaa ataagaatga 4980
 atgtggcgcc ccttcttccc agatgtaata gaaagctctg ccctatcaca aggggggtgt 5040
 tgaagcgccc cttgtgtttt aactgtattt aactgagcac aagatgcaca agctgtggtg 5100
 ggaaaccctc agtttaacct tggagtcttc cctgcagatc gcagacctgt ttccaggctg 5160
 atgtttctg tgtgtaattg ctacgctttc tgaagggttt tccaattgt ttagccttg 5220
 tgaagtattc ttaattataa cttgccttcc agcagtggtg catgacttga ttcaacgttt 5280
 ggttctgaac ttacacactg atgcgtttac tcatctaaca taatctgaca gggcctcagc 5340
 aaggagacca tacatttttg taacattttg atatgtttta atgcatctga cttagatctt 5400
 actgaataaa agcacttttc aaagag 5426

<210> 2815

<211> 6050

<212> DNA

<213> Homo sapiens

<400> 2815

ggcttcccca cgggaggagc cgaggcccg gccagccat ggccccctgg cgcaaagctg 60
 acaaggagcg gcacggcgtg gccatataca acttccaagg cagcggagcc cccagctct 120
 ccctgcagat cggcgatgtg gtgcgaatac aggagacgtg tggagactgg tataggggat 180
 acctcataaa gcacaaaatt ttacagggca ttttctctaa gtcattttat cacatcaagg 240
 aagtgcagct tgagaaaaga agaaatactg agaacatcat tcctgcagaa attcctctgg 300
 cacaagaagt gacaacgaca ctttgggaat ggggaagcat ctggaacaa ctctatgtgg 360
 ccagcaaaaa ggagcgtttt ctccaggtgc agtccatgat gtacgatctg atggagtggg 420
 ggtccagct tctctcagga accttaccga aggatgagct gaaggaactg aagcagaaa 480

tcacgtccaa aattgactat ggcaacaaaa tccttgagct tgatttgatt gtcagagatg	540
aagacggaaa tatcttggac cctgataata ccagtgcat cagcttgctc catgcacatg	600
aggaaagcaac tgataaaatc acagagcgta tcaaagaaga aatgtcaaaa gaccagccag	660
attatgcaat gtattcccg atctcctcat cccccacca tagcctctat gtgtttgtga	720
gaaactttgt gtgcagaatt ggggaagatg ctgagctctt catgtctctc tacgacccca	780
acaagcaaac ggtcataagt gagaactacc tagtgcgatg gggcagccgg ggcttcctta	840
aggagattga gatgctcaac aatctgaagg tggctctcac ggatcttgga aacaagacc	900
tcaacaggga taaaatttac ttgatttgct aaatagtcgg ggtcggaag atggatctta	960
aggatactgg tgcaaaagag tgcacgcagg gactgaggag gccctttggg gtggcagtta	1020
tggataaac agacatcatc aaggggaaag cagagagtga tgaagaaaag cagcacttca	1080
ttccttttca cccggttaca gctgagaatg acttcctaca cagcctgctg ggcaaagtca	1140
tagcctccaa gggggacagt ggagggaag gcctctgggt gacctgaag atgctggtgg	1200
gtgacatcat tcagattcgc aaggactatc cacacctggt ggacaggacc accgtggtgg	1260
ccaggaagct gggattccca gagatcatca tgcaggggga tgtcaggaa gacatctaca	1320
ttactctctt acaaggtgac ttgacaagt acaacaagac cacacagagg aatgtggaag	1380
tcacatgtgt tgtgtgctgc gaggatggca aaacgctgcc taatgcaatt tgcgtgggag	1440
caggggacaa gcccatgaat gagtatcgct ccgttggtga ctatcaagtc aaacagccac	1500
gctggatgga aacagtcaag gtggctgtcc ctattgaaga catgcagagg atccatctgc	1560
gattcatgtt tcgacatcgg tcacatctgg aatctaaaga taaaggagaa aagaactttg	1620
ccatgtccta tgtgaagctg atgaaagaag atgggactac tctacacgat ggattccatg	1680
acttagttgt cctcaagggg gacagcaaga agatggagga tgccagcgca tacctgaccc	1740
ttccttttta tcgacaccat gtggaaaaca agggggccac gctgagcagg agctccagca	1800
gtgttggggg gctttctgtc agctcccggt atgtgttctc catttccacc ctggtgtgct	1860
ccacaaagct cactcagaat gtgggcttgc tgggtttgct gaagtggcgt atgaagcctc	1920
aactgtctaca ggagaattta gaaaagtga agatttgga tggagaggaa gtggtaagt	1980
ttctecagga tactctggat gccctcttca acatcatgat ggagcattct caaagtgatg	2040
aatatgacat cctcgtcttt gatgccttga tttacataat aggactcatt gcagaccgga	2100
aatttcagca tttcaacacc gttctggagg cttacatcca acagcatttc agtgcgacct	2160
tggcttcaaa gaaattgatg acagtgtctg agacttactt ggatacctcc agcagagggg	2220
agcaatgtga gccaatccta agaacgtga aggcctttga atatgtgttc aagttcattg	2280

ttcgggtcgag gacattattt tcacagcttt atgaaggcaa agaacagatg gagtttgaag	2340
aatccatgag acggctcttt gaatccatca acaatctgat gaaaagtcaa tacaaaacta	2400
ccatcccttt gcagggtggc gctttgaaat acatcccatc tgtcttgcac gatgtagaaa	2460
tggtctttga tgcgaagtta ctacagccaac tcctgtatga gttctacacc tgcacccctc	2520
ctgtgaaact ccagaagcag aaagtacagt ctatgaatga gatagtccag agcaacctct	2580
ttaaaaagca agaatgccgg gacattctgc ttctgtcatc caccaaaagag ctgaaggagc	2640
tgctggagca gaaggatgac atgcaacacc aggtcctgga gaggaagtac tgcgttgaat	2700
tgctcaacag catcttgaa gtccttagct accaggatgc ggccttcacc taccaccata	2760
tccaagagat catggtccag ctgctgcgga cagtgaaccg gacagtcatc accatgggac	2820
gggatcacat tctgattagt cactttgtgg catgtatgac agccatctta aaccagatgg	2880
gtgaccagca ctactcctc tacattgaga ccttcacagc cagctctgaa ctgtgggact	2940
tcttgatgga gaccttcac atgttcaagg acctcattgg aaagaacgtg taccctggag	3000
actggatggc catgagcatg gttcaaaaaca ggtcttctct gagagctatc aacaagtttg	3060
cagaaacat gaaccagaag ttctagaac acacgaactt tgagtccag ctgtggaaca	3120
actattttca tctggcagtg gcttttatca ccaggattc tctgcagctg gagcagttct	3180
cacagccaa atacaacaaa atcctgaata agtatgggga catgagacgg ctaattggct	3240
tctccatccg tgatatgtgg tacaagcttg gtcagaacaa aatctgcttc atcccaggca	3300
tggtaggacc tatattagag atgacactta tccttagggc tgagctccgg aaagccacca	3360
taccaatctt ctcgacatg atgctgtgtg aatatcaaa aagtgaggat ttcaaaaagt	3420
ttgaaaacga aatcatcctg aagctggacc acgaggtaga agggggccga ggcgacgagc	3480
agtacatgca gctgctggag tcaatctga tggaatgtgc tgcagagcac ccaaccattg	3540
caaagtcggt ggagaacttc gtgaacctgg tcaaaggcct cctggagaag ctgctggatt	3600
accggggtgt gatgacagat gagagcaaa acaaccgcat gagctgcact gtgaacctgc	3660
tgaatttcta caagataac aacaggagg agatgtacat aaggtacctg tacaactcc	3720
gcgatcttca cctggactgt gacaattaca cagaggctgc ctacacgctc cttctccaca	3780
cctggcttct caagtggctg gatgagcagt gtgcatcaca ggtcatgcag acaggccagc	3840
agcaccacca gacacaccgg cagctcaagg agacgctcta cgagaccatc ataggctact	3900
ttgacaaagg aaagatgtgg gaagaggcca taagtctgtg caaggagctg gcggaacagt	3960
acgagatgga gatctttgac tatgagctgc tcagccagaa cctgatccag caggcaaaat	4020
tctatgaaag catcatgaaa atcctcaggc ccaaaaccaga ctactttgct gttggatact	4080
acggccaggg attccctctc ttctgcgga acaaagtgtt catctaccgc ggggaaggaa	4140

atgagcgaag agaagatttc cagatgcagc tgatgaccca gttcccaat gcagagaaga 4200
 tgaacaccac ctctgcccc ggagatgatg tgaagaatgc cccaggccag tatatccagt 4260
 gcttcactgt ccagcctgtc ttggatgaac atcccaggtt caagaataag ccagtgcttg 4320
 accagattat aaacttctac aaatccaact acgtgcaaag gttccactac tcccggcccc 4380
 tgcgcagggg gaccgtagac ccagagaatg agtttgcttc catgtggatt gagagaacct 4440
 ccttcgtgac tgcatacaag ctgccgggga tccctgcgctg gtttgagggtg gtgcacatgt 4500
 cgcagaccac aattagtctc ctggagaatg ccatagaaac catgtccacg gccaatgaga 4560
 agatcctgat gatgataaac cagtaccaga gtgatgagac cctccccatc aacctactct 4620
 ccatgctcct gaacgggatt gtggaccctg ctgtcatggg aggcttcgcc aagtatgaga 4680
 aggcccttct cactgaagag tatgtcaggg accaccctga ggaccaggac aagctgacct 4740
 acctcaagga cctgattgca tggcagatcc ctttcttggg agctgggatt aagatccatg 4800
 agaaaagggg gtcagataac ttgcgacct tccatgaccg gatggaggaa tgtttcaaga 4860
 acctgaaat gaagggtggg aaggagtacg gtgtccgaga gatgcctgac tttgacgaca 4920
 ggagagtggg cgcgcccgag tctatgtgc gtcatacag acagatgtcc atcatctctc 4980
 tggcttccat gaattctgac tgcagaccc ccagcaagcc tacctcagag agctttgacc 5040
 tggaattagc atcacccaag acgccgagag tggagcagga ggaaccgac tccccgggga 5100
 gcacctgccc tgaggtcaag ctgcggaggt ccaagaagag gacaaagaga agcagcgtag 5160
 tttttcgga tgagaaagca gctgcagagt cggacctgaa gcggtcttcc aggaagcatg 5220
 agttcatgag tgacaccaac ctctcggagc atgcggccat cccctcaag gcgtctgtcc 5280
 tctctcaaat gagctttgcc agccagtcca tgccctaccat cccagccctg gcgctctcag 5340
 tggcaggcat ccttgggttg gatgaggcca acacatctcc ccgcctcagc cagaccttcc 5400
 tccaactctc agatggtgac aagaagacac tcacacggaa gaaggtcaat cagttcttca 5460
 agacaatgct ggccagcaaa tcgggtgaag aaggcaaaac gatcccgac tcgctgtcca 5520
 cggacctgtg agctgtgct gactagggct gcatgggaga gccagggagg ggagtttctg 5580
 gaagaggaaa gccatgcgtg gaacatcgaa gcctcagaga gtgggagact gtcccatca 5640
 gttgtcctta cttagaggag acagagaggc caatcaggtc ccagagctgg agtgctaaca 5700
 agcccagcat cccctggggg tgtgatcatg gtggatgagg aagcctcaac gtgattctct 5760
 gaactcaagg taccagcaag aatgccttct cccagtgtgc tctcccaac atcctaggca 5820
 cagctttcat aacctagttt cttaggtgta agaaactgct tttatctcat ttattaagtc 5880
 tcagaactta acagaaaagg aagcctttta aatattcttt ttaattttat ttatagtaa 5940

cagttttgta ctttacattt ttttatacaa ccaaccagtt tcttttctag ccaatcatct 6000
 ctgaagaggt gctgtttctt actgacaata aaaaatgttc tcttggttcg 6050

 <210> 2816
 <211> 1030
 <212> DNA
 <213> Homo sapiens

 <400> 2816
 agatgtaaac caatttcagg ccacaactcc cttttctggt acagacagac catgatgcgg 60
 ggactggagt tgctcattta ctttaacaac aacgttccga tagatgatgc agggatgccc 120
 gaggatcgat tctcagctaa gatgcctaata gcatcattct ccaactctgaa gatccagccc 180
 tcagaaccca gggactcagc tgtgtacttc tgtgccagca gttttctgac ctgttcgggt 240
 aactatggct acaccttcgg ttctggggacc aggttaaccg ttgtagagga cctgaacaag 300
 gtgttccac cagaggtcgc tgtgtttgag ccatcagaag cagagatctc ccacacccaa 360
 aaggccacac tgggtgtcct gccacaggc ttcttcccc accacgtgga gctgagctgg 420
 tgggtgaatg ggaaggaggt gcacagtggg gtcagcacag acccgagacc cctcaaggag 480
 cagcccggcc tcaatgactc cagatactgc ctgagcagcc gcctgagggc ctctggccacc 540
 ttctggcaga acccccga ccacttcgcg tgtcaagtc agttctacgg gctctcggag 600
 aatgacgagt ggaccagga tagggccaaa cccgtcacc agatcgtcag cgcagaggcc 660
 tggggtagag cagactgtgg ctttacctcg gtgtcctacc agcaaggggc cctgtctgcc 720
 accatcctct atgagatcct gctagggaag gccaccctgt atgctgtgct ggtcagcgcc 780
 cttgtgttga tggccatggt caagagaaa gatttctgaa ggcagccctg gaagtggagt 840
 taggagcttc taaccgcga tggtttcaat acacattctt tttttgccag cgcttctgaa 900
 gagctgctct cacctctctg catcccaata gatatcccc tatgtgcatg cacacctgca 960
 cactcacggc tgaatatctc ctaaccaggg gggaccttag catgcctaag tgactaaacc 1020
 aataaaaatg 1030

<210> 2817
 <211> 2454
 <212> DNA
 <213> Homo sapiens

 <400> 2817
 ggaataggtt agtttcagac aagcctgctt gccggagctc agcagacacc aggccttcgg 60
 ggcaggcctg gccaccctg ggcctcagag ctgctgtctg ggcattcaga accggtcttc 120
 cattggcatt gggaccagag accccgcaag tggcctgttt gcctggacat ccacctgtac 180
 gtccccaggt ttcgggaggg ccaggggcga tgccagaccc cgcggcgcac ctgcccttct 240

tctacggcag catctcgcgt gccgagggcg aggagcacct gaagctggcg ggcattggcg 300
 acgggctctt cctgctgcgc cagtgcctgc gctcgtggg cggtatgtg ctgctgctcg 360
 tgcacgatgt gcgcttcac cactttccca tcgagcgcca gctcaacggc acctacgcca 420
 ttgccggcgg caaagcgcac tgtggaccgg cagagctctg cgagtctac tcgctcgacc 480
 ccgacggggt gccctgcaac ctgcgcaagc cgtgcaaccg gccgtcgggc ctgagccgc 540
 agccgggggt cttcgactgc ctgcgagacg ccatgggtgc tgactacgtg cgccagacgt 600
 ggaagctgga gggcgaggcc ctggagcagg ccatcatcag ccaggcccg cagggtggaga 660
 agctcattgc tacgacggcc cagcagcgga tgccctggta ccacagcagc ctgacgcgtg 720
 aggaggccga gcgcaactt tactctgggg cgcagaccga cggcaagttc ctgctgaggc 780
 cgcggaagga gcagggcaca tacgacctgt ccctcatcta tgggaagacg gtgtaccact 840
 acctcatcag ccaagacaag gcgggcaagt actgcattcc cgagggcacc aagtttgaca 900
 cgctctggca gctggtggag tatctgaagc tgaaggcgga cgggctcacc tactgcctga 960
 aggaggcctg ccccaacagc agtgccagca acgacctagg ggctgctgct cccacactcc 1020
 cagccacccc atccacgttg actcatcctc agagacgaat cgacaccctc aactcagatg 1080
 gatacacccc tgagccagca cgcataacgt ccccgagaca acccgggcgg atgcccatgg 1140
 acacgagcgt gtatgagagc ccctacagcg acccagagga gctcaaggac aagaagctct 1200
 tcctgaagcg cgataacctc ctcatagctg acattgaact tggtgcggc aactttggct 1260
 cagtgcgcca gggcgtgtac cgcattcgca agaagcagat cgacgtggcc atcaaggtgc 1320
 tgaagcaggg cacggagaag gcagacacgg aagagatgat gcgcgaggcg cagatcatgc 1380
 accagctgga caaccctac atcgtgcggc tcattggcgt ctgccaggcc gaggccctca 1440
 tgctggtcat ggagatggct gggggcgggc cgctgcacaa gttcctggtc ggcaagaggg 1500
 aggagatccc tgtgagcaat gtggccgagc tgctgcacca ggtgtccatg gggatgaagt 1560
 acctggagga gaagaacttt gtgcaccgtg acctggcggc ccgcaacgtc ctgctggtta 1620
 accggcacta cgccaagatc agcgactttg gcctctccaa agcactgggt gccgacgaca 1680
 gtactacac tgcccgcctc gcaggggaagt ggcgcgtcaa gtggtacgca ccgaatgca 1740
 tcaacttccg caagttctcc agccgcagcg atgtctggag ctatggggtc accatgtggg 1800
 aggccttgct ctacggccc aagccctaca agaagatgaa agggccggag gtcattggct 1860
 tcatcgagca gggcaagcgg atggagtgcc caccagagtg tccaccgcaa ctgtacgcac 1920
 tcatgagtga ctgctggatc tacaagtggg aggatcgccc cgacttctcg accgtggagc 1980
 agcgcatcgc agcctgttac tacagcctgg ccagcaaggt ggaagggccc ccaggcagca 2040

cacagaagcc	tgaggctgcc	tgtgectgag	ctcccgtgc	ccaggggagc	cctccacgcc	2100
ggctcttccc	caccctcagc	cccaccccag	gtectgcagt	ctggctgagc	cctgcttggt	2160
tgtctccaca	cacagctggg	ctgtggtagg	gggtgtctca	ggccacaccc	gccttgcatt	2220
gcctgcctgg	ccccctgtcc	tctctggctg	gggagcaggg	aggctccggga	gggtgcggct	2280
gtgcagcctg	tcttgggctg	gtggctcccc	gagggccctg	agctgagggc	attgcttaca	2340
cggatgcctt	cccctggggc	ctgacattgg	agcctgggca	tcctcaggtg	gtcaggcgta	2400
gataccacga	ataaaccacg	cttccctctt	gaaaaaaaa	aaaaaaaaaa	aacc	2454

<210> 2818

<211> 2761

<212> DNA

<213> Homo sapiens

<400> 2818

agaggacgcc	cggatgaagg	gtccacgct	ggcagtttct	gcgtgttagc	atttctagaa	60
tagagtgggt	gggaactgac	ccaagtaaag	tcccagagac	tgaacacatg	acgcacagga	120
aagcctcaag	tgggaggaga	aatgcaaatc	ccctactgat	gatggcgctca	gcggctttct	180
cctaggggact	gtgaggggcg	cttctgactt	tggacttgag	cactgcctgg	gacctgtgct	240
gagagagcgc	tagcatgtct	cagtgaatc	aagtccaaca	gttagaaatc	aagtttttgg	300
agcaggtgga	tcaattctat	gatgacaact	ttccctgga	aattcggcat	ctgttggccc	360
aatggattga	aaatcaagac	tgggaggcag	cttctaaca	tgaaccatg	gcaacgatcc	420
ttcttcaaaa	cttgtaata	caactggatg	aacagttagg	tcgtgtttcc	aaagagaaaa	480
acctactctt	gatacacaat	ctaaaagaa	ttaggaaggt	ccttcaggga	aaatttcatg	540
gaaatccaat	gcatttagct	gtggttattt	caaactgttt	aagggagag	aggagaatat	600
tggctgcagc	caacatgcct	gtccaggggc	ctctagagaa	atccttaca	agttcttcag	660
tttcagaaa	acagaggaat	gtggagcaca	aagtggctgc	cattaaaaac	agtgtgcaga	720
tgacagaaca	agataccaaa	tacttagaag	atctgcaaga	cgaatttgac	tacaggtata	780
aaacaattca	gacaatggat	cagagtgaca	agaatagtgc	catggtgaat	caggaagttt	840
tgacactgca	ggaatgctt	aacagcctcg	atttcaagag	aaaggaggct	ctcagtaaaa	900
tgaccccaat	catccatgag	acagacctgt	taatgaacac	catgctcata	gaagagctgc	960
aagactggaa	gcggcggcag	caaatcgctt	gcacggggg	tcactccac	aatgggctcg	1020
accagcttca	gaactgcttt	acactatttg	cagaaaagtct	tttccaaactg	agaaggcaat	1080
tggagaaact	agaggagcaa	tctaccaaaa	tgacatatga	aggtgatccc	attccaatgc	1140
aaagaactca	catgctagaa	agagtcacct	tcttgatcta	caaccttttc	aagaactcat	1200

ttgtggttga ggcagaccca tgtatgccaa cccaccctca gaggccgttg gtacttaaaa	1260
ccctaattca gttcactgta aaactaaggc tactaataaa attgccagaa ctaaaactatc	1320
aggtaaaggc taaggcatca attgacaaga atgtttcaac tctaagcaac cgaagatttg	1380
tactttgttg aactaatgac aaagccatgt ctattgaaga atcttccaat gggagtctct	1440
cagtagaatt tcgacatttg caaccaaagg aaatgaagtc cagtgtctgga ggtaaaaggaa	1500
atgagggctg tcacatggtg actgaagaac ttcattccat aacgtttgaa acacagatct	1560
gcctctatgg cctgaccata gatttgaggaga ccagctcatt gcctgtggtg atgatttcca	1620
atgtcagtca gttacctaata gcttgggcat ccatcatttg gtacaacgtg tcaaccaacg	1680
attcccagaa cttgggttttc ttaataatac ctccacctgc cacattgagt caactactgg	1740
aggatgatga ctggcagttt tcacgtgacg ttggctgttg tcttaactca gatcaactcc	1800
atatgtctgc agagaagcct acagtccaat ctactctacg tgatggctcac ctccactggg	1860
ccaagttctg caaggaacat ttacctggta aatcatttac cttttggaca tggcttgaag	1920
caatattgga tctaattaa gaaacacattc tcccccttg gattgatggg tatgtcatgg	1980
gctttgttag caaagagaag gaacggctgt tgctaaagga taaaatgcct ggcacctttt	2040
tattaagatt cagtgaagc catctcggag gaataacttt cacctgggtg gaccattctg	2100
aaagtgggga agtgagattc cactctgtag aacctacaa taaaggccgg ttgtctgctc	2160
tgccattcgc tgacatcctg cgagactaca aagttattat ggctgaaaac attcctgaaa	2220
acctctgaaa gtacctatat cctgacattc ccaaagacaa agccttcggg aaacactaca	2280
gctctcagcc ttgcgaagtt tcaagaccaa cagaaagggg tgacaaaggc tatgttcctt	2340
ctgtttttat ccccatctca acaatccgaa gtgattcaac agagccacat tctccatcag	2400
acctctcttc catgtctcca agtgtgtatg cgggtgtgag agaaaacctg agtcccacaa	2460
caattgaaac tgcaatgaag tctccttatt ctgctgaatg acaggataaa ctctgacgca	2520
ccaagaaagg aagcaaatga aaaagtttaa agactgttct ttgcccaata accacatttt	2580
atttctctcag ctttgtaaat accaggttct aggaatgtt tgacatctga agctctcttc	2640
acactcccggt ggcaactctc aattgggagt gttgtgactg aaatgcttga aaccaaagct	2700
tcagataaac ttgcaagata agacaacttt aagaaccagc tgtaataaac aatattaaca	2760
g	2761

<210> 2819

<211> 1190

<212> DNA

<213> Homo sapiens

<400> 2819

cagatccatc aggtccgagc tgtgttgact accacttttc ccttcgtctc aattatgtct	60
tggaaaaagg ctttgcggat ccccgaggc cttcgggcag caactgtgac cttgatgtcg	120
tcgatgtga gcacccagc ggctgagggc agagactctc ccgaggattt cgtgtaccag	180
tttaagggca tgtgctactt caccaacggg acagagcgcg tgcgtcttgt gacgagaagc	240
atctataaac gagaagagat cgtgcgcttc gacagcgacg tgggggagtt ccgggcgggtg	300
acgctgtcgg ggctgcctgc gcgcgagtac tggaacagcc agaaggacat cctggagagg	360
aaacgggcgg cggtggacag ggtgtgcaga cacaactacc agttggagct ccgcacgacc	420
ttgcagcgcc gagtggagcc cacagtgacc atctccccat ccaggacaga ggcctcaac	480
caccacaacc tgcgtggtctg ctcggtgaca gatttctatc cagcccagat caaagtccgg	540
tgggttcgga atgaccagga ggagacagct ggcgttgtgt ccacccccct tattaggaat	600
ggtgactgga ccttcagat cctgggtgatg ctggaaatga ctcccagcg tggagacgtc	660
tacacctgcc acgtggagca cccagcctc cagagcccca tcaccgtgga gtggcgggct	720
caatctgaat ctgccagag caagatgctg agtggcattg gaggtctcgt gctggggctg	780
atcttctcgg ggctgggctt tatcatccat cacaggagtc agaaagggct cctgcaactga	840
ctcctgagac tattttaact gggattggtt atcacttttc tgtaacgcct gcttgcctc	900
gccagaatt cccagctgtc tgtgtcagcc tgtccccctg agatcagagt cctacagtgg	960
ctgtcacgca gccaccaggt catctccttt catccccacc ttgagggcga tggctgtgac	1020
cctacttctc gcactgacc acagcctctg cctgtgcaag gccagctgca tctactcagg	1080
ccccaaaggg tttctgttcc tattctctcc tcagactgct caagagaagc acatgaaaac	1140
cattacctga ctttagagct tttttacata attaaacatg atcctgagtt	1190

<210> 2820

<211> 3003

<212> DNA

<213> Homo sapiens

<400> 2820

tcggggagag aagctggact gcagctgggt tcaggaactt ctcttgacga gaagagagac	60
caaggaggcc aagcaggggc tgggccagag gtgcccaact ggggaaactg aggctcggtc	120
cggaaagggt aagtaacttg tccaagatca caaagctggt gaacatcaag ttggtgctat	180
ggcaaggctg ggaactgca gctgacttg ggtgccttg atcatctgc tgcctcccg	240
aagtctggag gagtgcgggc acatcagtgt ctcagcccc atcgtccacc tgggggatcc	300
catcacagcc tcctgcatca tcaagcagaa ctgcagccat ctggaccagg agccacagat	360
tctgtggaga ctgggagcag agcttcagcc cgggggcagg cagcagcgtc tgtctgatgg	420

gaccacaggaa tctatcatca ccttgcccca cctcaaccac actcaggcct ttctctcctg	480
ctgcctgaac tggggcaaca gcctgcagat cctggaccag gttagctgc gcgcaggcta	540
ccctccagcc ataccccaca acctctcctg cctcatgaac ctcaacaaca gcagcctcat	600
ctgccagtgg gagccaggac ctgagaccca cctaccacc agcttcactc tgaagagttt	660
caagagccgg ggcaactgtc agaccaagg ggactccact ctggactcgc tgcccaagga	720
cgggcagagc cactgtctga tcccacgcaa acacctgctg ttgtaccaga atatgggcat	780
ctgggtgcag gcagagaatg cgctggggac cagcatgtcc ccacaactgt gtcttgatcc	840
catggatgtt gtgaaactgg agcccccat gctgcggacc atggacccca gccctgaagc	900
ggccctccc caggcaggct gcctacagct gtgctgggag ccatggcagc caggcctgca	960
cataaatcag aagtgtgagc tgcgcccaa gccgcagcgt ggagaagcca gctgggcact	1020
ggtgggccc ctcccccttg aggcccttca gtatgagctc tgcgggctcc tcccagccac	1080
ggctacacc ctgcagatac gctgcatccg ctggccctcg cctggccact ggagcgactg	1140
gagccccagc ctggagctga gaactaccga acgggcccc actgtcagac tggacacatg	1200
gtggcgccag aggcagctgg accccaggac agtgcagctg ttctggaagc cagtgccct	1260
ggaggaagac agcggacgga tccaaggtta tgtggtttct tggagacct caggccaggc	1320
tggggccatc ctgccctct gcaacaccac agagctcagc tgcacctcc acctgccttc	1380
agaagcccag gagtgggcc ttgtggccta taactcagcc ggacacctc gtcccactcc	1440
ggtggtcttc tcagaaagca gaggccagc tctgaccaga ctccatgcc a tggcccagaga	1500
ccctcacagc ctctgggtg gctgggagcc ccccaatcca tggcctcagg gctatgtgat	1560
tgagtggggc ctgggcccc ccagcgcgag caatagcaac aagacctgga ggatggaaca	1620
gaatgggaga gccacggggt ttctgctgaa ggagaacatc aggcccttc agctctatga	1680
gatcatcgtg actccctgt accaggacac catgggaccc tccagcatg tctatgccta	1740
ctctcaagaa atggctcccc ccatgcccc agagctgcat ctaaagcaca ttggcaagac	1800
ctgggcacag ctggagtggg tgccctgagcc ccctgagctg gggaagagcc cccctaccca	1860
ctacaccatc ttctggacca acgctcagaa ccagtccttc tccgccatcc tgaatgcctc	1920
ctcccgtggc ttgtctctcc atggcctgga gcccgccagt ctgtatcaca tccacctcat	1980
ggctgccagc caggctgggg ccaccaacag tacagtcctc acctgatga ccttgacccc	2040
agaggggtcg gagctacaca tcatcctggg cctgttcggc ctccctgtgt tgcctacctg	2100
cctctgtgga actgcctggc tctgttcag ccccaacagg aagaatcccc tctggccaag	2160
tgctccagac ccagctcaca gcagcctggg ctccctgggtg ccacaaatca tggaggagga	2220
tgctctccag ctgcccgcc ttggcacgcc acccatcacc aagctcacag tgcctggagga	2280

ggatgaaaag aagccgggtgc cctgggagtc ccataacagc tcagagacct gtggcctccc 2340
 cactctggtc cagacctatg tgctccaggg ggacccaaga gcagtttcca cccagcccca 2400
 atcccagctc ggccaccagc atcaggctct ttatgggcag ctgctgggca gcccacaaag 2460
 cccaggggcca gggcactatc tccgctgtga ctccactcag cccctcttgg cgggcctcac 2520
 ccccagcccc aagtcctatg agaacctctg gttccaggcc agcccttgg ggaccttgg 2580
 aaccccgacc ccaagccagg aggacgactg tgtctttggg cactgtctca acttccccct 2640
 cctgcagggg atccgggtcc atgggatgga ggcgctgggg agcttctagg gcttctggg 2700
 gttcccttct tgggcctgcc tcttaaaggc ctgagctagc tggagaagag gggagggtcc 2760
 ataagcccat gactaaaaac taccccagcc caggctctca ccatctccag tcaccagcat 2820
 ctccctctcc tcccaatctc cataggctgg gcctccagg cgatctgcac actttaagga 2880
 ccagatcatg ctccatccag cccaccccaa tggccttttg tgctgtttc ctataacttc 2940
 agtattgtaa actagttttt ggtttgagc ttttgttgtt gtttatagac actcttgggt 3000
 gta 3003

<210> 2821
 <211> 718
 <212> DNA
 <213> Homo sapiens

<400> 2821
 ttaagcaaaag gaaaccaaag gaatcgtttc aaatggactc atggcttaga aatctttatt 60
 cttagggcag tcagtagtat tctaaagctt tctgacaaga taaaggaagt caccaaaatt 120
 tcttttttta aattgtatct aatcctcaac aacaaaccaa aacagaacaa ttaaacagcc 180
 aaataaaac tcagggacaa catttttggg gtatttgagc cctccagca agtttcaact 240
 tgggtttgta ttttaaatgt tttaacaaga ttgtccatgt gcttccctag gctgagctgg 300
 cattggtctg ctgacctgtt ttgtgtttt tctttttttt atacacaaca tttatttcaa 360
 actattggga gggatgagag tggcttaaaa acttccatcc ctacttttca agagtgcagt 420
 tgattctgaa tctgaaagcc cgcctctgtc ctaaaataca aacaagcaca gacattaaac 480
 ctggatacta tatgataaag agggatgtaa ctattgaatt ggatacaagg atcagaatgg 540
 aaagaaactc acgatgaaat tgaacctggg ttttgatat ttatcaaact tgtgctgaga 600
 atagtgtctg attatacgac ttttaagcaa agttgggtgt aattagggtga aaacagccca 660
 ggtcctcccg ggagcacaga ggggetaggg gctggctcct ctcggttgcct ctagtctt 718

<210> 2822
 <211> 2776

<212> DNA

<213> Homo sapiens

<400> 2822

cagggcagac	tggtagcaaa	gccccacgc	ccagccagga	gcaccgcgc	ggactccagc	60
acaccgaggg	acatgctggg	cctgcgcccc	ccactgctcg	ccctgggtggg	gctgctctcc	120
ctcgggtgcg	tcctctctca	ggagtgcacg	aagttcaagg	tcagcagctg	ccgggaatgc	180
atcgagtctgg	ggccccgctg	cacctgggtgc	cagaagctga	acttcacagc	gccgggggat	240
cctgactcca	ttcgctcgca	cacccgccca	cagctgctca	tgaggggctg	tgcggtgac	300
gacatcatgg	accccacaag	cctcgctgaa	accaggaag	accacaatgg	gggccagaag	360
cagctgtccc	cacaaaaagt	gacgctttac	ctgcgaccag	gccaggcagc	agcgttcaac	420
gtgaccttcc	ggcgggccaa	gggctacccc	atcgacctgt	actatctgat	ggacctctcc	480
tactccatgc	ttgatgacct	caggaatgtc	aagaagctag	gtggcgacct	gctccggggc	540
ctcaacgaga	tcaccgagtc	cgcccgcat	ggcttcgggt	ccttcgtgga	caagaccgtg	600
ctgcgcttgc	tgaacacgca	ccctgataag	ctgcgaaacc	catgccccaa	caaggagaaa	660
gagtgcacgc	ccccgtttgc	cttcaggcac	gtgctgaagc	tgaccaacaa	ctccaaccag	720
tttcagaccg	aggctgggaa	gcagctgatt	tccggaacc	tgatgcacc	cgagggtggg	780
ctggacgcca	tgatgcaggt	cgccgcctgc	ccggagaaa	tcggctggcg	caacgtcacg	840
cggtctgtgg	tgtttgccac	tgatgacggc	ttccatttgc	cgggcgacgg	aaagctgggc	900
gccatcctga	cccccaacga	cgcccgctgt	cacctggagg	acaacttgta	caagaggagc	960
aacgaattcg	actaccctac	ggtggggccag	ctggcgacac	agctggctga	aaacaacatc	1020
cagcccatct	tcgcggtgac	cagtaggatg	gtgaagacct	acgagaaact	caccgagatc	1080
atccccaaat	cagccgtggg	ggagctgtct	gaggactcca	gcaatgtggt	ccatctcatt	1140
aagaatgctt	acaataaact	ctctccagg	gtcttctg	atcacacgc	cctccccgac	1200
accctgaaag	tcacctacga	ctcttctgc	agcaatggag	tgacgcacag	gaaccagccc	1260
agagggtgact	gtgatggcgt	gcagatcaat	gtcccgatca	ccttcacagg	gaaggctcacg	1320
gccacagagt	gcatccagga	gcagtcgttt	gtcatccggg	cgctgggctt	cacggacata	1380
gtgaccgtgc	aggttcttcc	ccagtgtgag	tgccgggtgc	gggaccagag	cagagaccgc	1440
agcctctgcc	atggcaagg	cttcttgagg	tgccgcatct	gcagggtgta	cactggctac	1500
attgggaaaa	actgtgagtg	ccagacacag	ggccggagca	gccaggagct	ggaagggaagc	1560
tgccggaagg	acaacaactc	catcatctgc	tcagggtctg	gggactgtgt	ctcggggcag	1620
tgccgtgtgc	acaccagcga	cgtccccggc	aagctgatat	acgggcagta	ctgcgagtg	1680
gacacatca	actgtgagcg	ctacaacggc	caggctctgc	gcggccggg	gagggggctc	1740

tgcttctgcg ggaagtgccg ctgccaccgc ggctttgagg gctcagcgtg ccagtgcgag 1800
 aggaccactg agggctgcct gaacccgcgg cgtgttgagt gtatgggtcg tggccgggtgc 1860
 cgctgcaacg tatgcgagtg ccattcaggc taccagctgc ctctgtgccca ggagtgcctc 1920
 ggctgccccct caccctgtgg caagtacatc tctcgcgccg agtgccctgaa gttcgaaaag 1980
 ggcccccttg ggaagaactg cagcgcggcg tgtccgggcc tgcagctgtc gaacaacccc 2040
 gtgaagggca ggacctgcaa ggagagggac tcagagggtc gctgggtggc ctacacgctg 2100
 gagcagcagg acgggatgga ccgctacctc atctatgtgg atgagagccg agagtgtgtg 2160
 gcaggcccca acatcgccgc catcgctggg gccaccgtgg caggcatcgt gctgatcggc 2220
 attctctctg tggatcatcg gaaggtctg atccacctga gcgacctcgg ggagtacagg 2280
 cgctttgaga aggagaagct caagtccag tggacaatg ataatccctc tttcaagagc 2340
 gccaccacga cggatcatga cccaagtgt gctgagagtt aggagcactt ggtgaagaca 2400
 aggccgtcag gaccacccat gtctgcccc tcacgcggcc gagacatggc ttggccacag 2460
 ctcttgagga tgtcaccaat taaccagaaa tccagttatt ttccgcctc aaaatgacag 2520
 ccattgcccg ccggtgtctc tgggggctcg tccgggggac agctccactc tgactggcac 2580
 agtctttgca tggagacttg aggagggtt gaggttggtg aggttaggtg cgtgttctc 2640
 gtgcaagtca ggacatcagt ctgattaaag gtggtgcca tttatttaca tttaaacttg 2700
 tcagggtata aaatgacatc ccattaatta tattgttaat caatcacgtg tatagaaaaa 2760
 aaaataaaac ttcaat 2776

<210> 2823

<211> 4428

<212> DNA

<213> Homo sapiens

<400> 2823

aggtcacaga gcagtataa ctacctgcca gtgtctctta ggagtgaggt acctggagtt 60
 cggggacccc aacctgtgac aatgacagca gacaaattgg tttcttttgt gaatggcaga 120
 aagggtggtg agaaaaatgc agatccagag acaacccttt tggcctacct gagaagaaag 180
 ttggggctga gtggaaccaa gctcggctgt ggagaggggg gctgcggggc ttgcacagtg 240
 atgctctcca agtatgatcg tctgcagaac aagatcgtcc acttttctgc caatgcctgc 300
 ctggccccc ctctgctcct gcaccatgtt gcagtgcaca ctgtggaagg aataggaagc 360
 accaagacga ggctgcattc tgtgcaggag agaattgcca aaagccacgc ctcccagtgc 420
 gggttctgca cccctggcat cgtcatgagt atgtacacac tgcctcggaa tcagcccgag 480
 cccaccatgg aggagattga gaatgccttc caaggaaatc tgtcccgctg cacaggctac 540

agaccatcc tccagggctt ccggaccttt gccagggatg gtggatgctg tggaggagat 600
 gggaataatc caaattgctg catgaaccag aagaaagacc actcagtcag ccactcgcca 660
 tctttattca aaccagagga gtccagcccc ctggatccaa cccaggagcc catttttccc 720
 ccagagtgc tgaggctgaa agacactcct cggaagcagc tgcgatttga aaggagcgt 780
 gtgacgtgga tacaggcctc aacctcaag gagctgctgg acctcaaggc tcagcaccct 840
 gacgccaagc tggctgctgg gaacacggag attggcattg agatgaagtt caagaatatg 900
 ctgtttccta tgattgtctg cccagcctgg atccctgagc tgaattcggt agaactgga 960
 cccgacggta tctcctttgg agctgcttgc cccctgagca ttgtgaaaa aacctggtg 1020
 gatgctgttg ctaagcttcc tgcccaaaag acagaggtgt tcagaggggt cctggagcag 1080
 ctgcgctggt ttgctgggaa gcaagtcaag tctgtggcgt ccgttgagg gaacatcatc 1140
 actgccagcc ccactctcca cctcaacccc gtgttcattg ccagtggggc caagctgaca 1200
 ctagtgtcca gaggcaccag gagaactgtc cagatggacc acaccttctt ccttggtac 1260
 agaaagacc tgctgagccc ggaggagata ctgctctcca tagagatccc ctacagcagg 1320
 gagggggagt atttctcagc attcaagcag gcctcccga gagaagatga cattgccaa 1380
 gtaaccagt gcatgagagt ttattcaag ccaggaacca cagaggtaca ggagctggcc 1440
 ctttgcctat gtggaatgac caacagaacc atctcagccc tcaagaccac tcagaggcag 1500
 ctttccaagc tctggaagga ggagctgctg caggacgtgt gtgcaggact ggcagaggag 1560
 ctgcctctgc ctcccgatgc cctgggtggc atggtggact tccgtgac cctcacctc 1620
 agcttcttct tcaagttcta cctgacagtc cttcagaagc tgggccaaga gaacctggaa 1680
 gacaagtgtg gtaaatgga cccacttct gccagtgcaa ctttactgtt tcagaaagac 1740
 ccccagccc atgtccagct cttccaagag gtgcccaagg gtcagtctga ggaggacatg 1800
 gtgggcggc cctgcccc cctggcagcg gacatgcagg cctctggtga ggcgtgtac 1860
 tgtgacgaca ttctctgcta cgagaatgag ctgtctctcc ggctgggtcac cagcaccgg 1920
 gccacgcca agatcaagtc catagataca tcagaagcta agaaggttcc agggtttgtt 1980
 tgtttcattt ccgctgatga tgttctggg agtaacataa ctggaatttg taatgatgag 2040
 acagtctttg cgaaggataa ggttacttgt gttgggcata tcattggtgc tgtggtgtct 2100
 gacaccccg aacacacaca gagagctgcc caaggggtga aaatcaccta tgaagaacta 2160
 ccagccatta tcacaattga ggtgctata aagaacaact ccttttatgg acctgagctg 2220
 aagatcgaga aaggggacct aaagaagggg ttttccgaag cagataatgt tgtgtcagg 2280
 gagatataca tcggtggcca agagcacttc tacctggaga ctactgcac cattgtctgt 2340

cctaaagcg	aggcaggga	gatggagctc	tttgtgtcta	cacagaacac	catgaagacc	2400
cagagctttg	ttgcaaaaat	gttgggggtt	ccagcaaacc	ggattgtggt	tcgagtgaag	2460
agaatggag	gaggctttg	aggcaaggag	acccggagca	ctgtggtgtc	cacggcagtg	2520
gccctggctg	catataagac	cggccgacct	gtgcgatgca	tgctggaccg	tgatgaggac	2580
atgctgataa	ctggtggcag	acatcccttc	ctggccagat	acaaggttgg	cttcatgaag	2640
actgggacag	ttgtggctct	tgaggtggac	cacttcagca	atgtggggaa	caccaggat	2700
ctctctcaga	gtattatgga	acgagcttta	ttccacatgg	acaactgcta	taaaatcccc	2760
aacatccggg	gactggggcg	gctgtgcaaa	accaaccttc	cctccaacac	ggccttcctg	2820
ggctttgggg	ggccccagg	gatgctcatt	gccgagtgtc	ggatgagtga	agttgcagtg	2880
acctgtggga	tgcttcgaga	ggaggtgcgg	agaaaaaac	tgtacaaaga	aggggacctg	2940
acacacttca	accagaagct	tgaggggttc	accttgccca	gatgctggga	agaatgccta	3000
gcaagctctc	agtatcatgc	tcggaagagt	gaggttgaca	agttcaacaa	ggagaattgt	3060
tggaataaga	gaggattgtg	cataattccc	accaagtttg	gaataagctt	cacagttcct	3120
tttctgaatc	aggcaggagc	cctacttcat	gtgtacacag	atggctctgt	gctgctgacc	3180
cacgggggga	ctgagatggg	ccaaggcctt	cataccaaaa	tggtccagg	ggccagtaga	3240
gctctgaaaa	tccccacctc	taagatttat	atcagcgaga	caagcactaa	cactgtgccc	3300
aacacctctc	ccacggctgc	ctctgtcagc	gctgacctca	atggacaggc	cgtctatgcg	3360
gcttgtcaga	ccatcttgaa	aaggctggaa	ccctacaaga	agaagaatcc	cagtggctcc	3420
tggaagact	gggtcacagc	tgcttacatg	gacacagtga	gcttgtctgc	cactgggttt	3480
tatagaacac	ccaatctggg	ctacagcttt	gagactaact	cagggaaccg	cttccactac	3540
ttcagctatg	gggtggcttg	ctctgaagta	gaaatcgact	gcctaacagg	agatcataag	3600
aacctccgca	cagatattgt	catggatgtt	ggctccagtc	taaacctctg	cattgatatt	3660
ggacagggtg	aaggggcatt	tgccaggggc	cttgccctct	tcacctaga	ggagctacac	3720
tattcccccg	aggggagcct	gcacaccctg	ggccctagca	cctacaagat	cccgccattt	3780
ggcagcatcc	ccattgagtt	cagggtgtcc	ctgctccgcg	actgccccaa	caagaaggcc	3840
atctatgcac	cgaaggctgt	tgagagccg	cccctcttcc	tggtgtcttc	tatcttcttt	3900
gccatcaaa	atgccatccg	tgacgtctga	gctcagcaca	caggtaataa	cgtgaaggaa	3960
ctcttccgcc	tagacagccc	tgccaccctg	gagaagatcc	gcaatgcctg	cgtggacaag	4020
ttcaccaccc	tgtgtgtcac	tggtgtccca	gaaaactgca	aacctgggtc	tgtgagggtc	4080
taagagaga	gtcttcagca	gagtcttctt	gtgtgccttc	tggtgttcca	tggagcagga	4140
ggaacatacc	acagaacatg	gatctattaa	agtcacagaa	tgacagacct	gtgatttgtc	4200

```

aagatgggat ttggaagaca agtgaatgca atggaagatt ttgatcaaaa atgtaatttg 4260
taaacaacaat gataagcaaa ttcaaaactg ttatgcctaa atggtgaata tgcaattagg 4320
atcattttct gtctgtttta atcatgtatc tggaaataggg tcgggaaggg tttgtgctat 4380
tccccactta ctggacagcc tgtataacct caaaaaaaaa aaaaaaaaa 4428

<210> 2824
<211> 1702
<212> DNA
<213> Homo sapiens

<400> 2824
aaattttcca gccgatcact ggagctgact tccgcaatcc cgatggaata aatctagcac 60
ccctgatggg gtgccacac tttgctgccg aaacgaagcc agacaacaga ttccatcag 120
caggatgtgg gggtcaagg ttctgctgct acctgtggtg agctttgtct tgtacctga 180
ggagatactg gacaccact gggagctatg gaagaagacc cacaggaagc aatataacaa 240
caaggtggat gaaatctctc ggcgtttaat ttgggaaaaa aacctgaagt atatttccat 300
ccataacctt gaggtctctc ttggtgtcca tacatatgaa ctggctatga accacctggg 360
ggacatgacc agtgaagagg tggttcagaa gatgactgga ctcaaagtac cctgtctca 420
ttcccgagcgt aatgacaccc ttatatccc agaatgggaa ggtagagccc cagactctgt 480
cgactatcga aagaaaggat atgttactcc tgtcaaaaat cagggtcagc gtgggtctctg 540
ttgggctttt agctctgtgg gtgccctgga gggccaaact aagaagaaaa ctggcaaaact 600
cttaaatctg agtcccaga acctagtgga ttgtgtgtct gagaatgatg gctgtggagg 660
gggtacatg accaatgcct tccaatatgt gcagaagaac cggggtattg actctgaaga 720
tgctaccca tatgtgggag aggaagagag ttgtatgtac aaccaacag gcaaggcagc 780
taaatgcaga gggtagagag agatccccga ggggaatgag aaagccctga agagggcagc 840
ggcccgagtg ggacctgtct ctgtggccat tgatgcaagc ctgacctcct tccagtttta 900
cagcaaaagg gtgtattatg atgaaagctg caatagcagc aatctgaacc atgcggtttt 960
ggcagtgga tatggaatcc agaagggaaa caagcactgg ataattaaaa acagctgggg 1020
agaaaactgg ggaacaacag gatatactct catggctcga aataagaaca acgcctgtgg 1080
cattgccaac ctggccagct tccccagat gtgactccag ccagccaaat ccatectgct 1140
cttcatttc ttccacgatg gtgcagtgtg acgatgcaat ttggaaggga gttggtgtgc 1200
tatttttgaa gcagatgtgg tgatactgag attgtctgtt cagtttcccc atttgtttgt 1260
gcttcaaatg atccttccca ctttgcctct ctccaccat gaccttttc actgtggcca 1320
tcaggacttt cctgacagc tgtgtactct taggctaaga gatgtgacta cagcctgccc 1380

```

```

ctgactgtgt tgtcccaggg ctgatgctgt acaggtacag gctggagatt ttcacatagg 1440
ttagattctc attcacggga ctagttagct ttaagcacc tagaggacta gggtaatctg 1500
acttctcact tcctaagttc cttctctat cctcaaggta gaaatgtcta tgttttctac 1560
tccaattcat aaatctattc ataagtcctt ggtacaagtt tacatgataa aaagaatgt 1620
gatttgtctt ccttctcttg cacttttgaa ataaagtatt tatctcctgt ctacagttta 1680
ataaatagca tctagtacac at
\
1702

```

<210> 2825

<211> 2771

<212> DNA

<213> Homo sapiens

<400> 2825

```

cgaggcggat cgggtgttgc atccatggag cgagctgaga gctcgagtac agaacctgct 60
aaggccatca aacctattga tcggaagtca gtccatcaga ttgtctctgg gcaggtggtg 120
ctgagctcaa gcactgcggt aaaggagtta gtagaaaaca gtctggatgc tggtgccact 180
aatattgac taaagcttaa ggactatgga gtggatctta ttgaagtttc agacaatgga 240
tgtggggtag aagaagaaaa cttcgaaggc ttaactctga aacatcacac atctaagatt 300
caagagtttg ccgacctaac tcagggtgaa acttttggct ttcgggggga agctctgagc 360
tcactttgtg cactgagcga tgtcaccatt tctacctgcc acgcatcggc gaaggttgga 420
actcgactga tgtttgatca caatgggaaa attatccaga aaacccctca ccccgcccc 480
agagggacca cagtcagcgt gcagcagtta tttccacac tacctgtgcg ccataaggaa 540
tttcaaagga atattaagaa ggagtatgcc aaaaaggctc aggtcttaca tgcatactgt 600
atcatttcag caggcatccg tgtaagttgc accaatcagc ttggacaagg aaaacgacag 660
cctgtggtat gcacaggtgg aagccccagc ataaaggaaa atatcggtc tgtgtttggg 720
cagaagcagt tgcaaagcct cattcctttt gttcagctgc cccctagtga ctccgtgtgt 780
gaagagtacg gtttgagctg ttcggatgct ctgcataate ttttttcat ctacggtttc 840
atttcacaat gcacgcagtg agttggaagg agttcaacag acagacagtt tttctttatc 900
aaccggcggc cttgtgaccc agcaaaggtc tgcagactcg tgaatgaggt ctaccacatg 960
tataatcgac accagtatcc atttgttgtt cttaacattt ctgttgattc agaatgcgtt 1020
gatatcaatg ttactcaga taaaaggcaa attttgctac aagaggaaaa gcttttgggt 1080
gcagttttta agacctcttt gataggaatg tttgatagt atgtcaacaa gctaataatgc 1140
agtcagcagc cactgctgga tgttgaaggt aacttaataa aaatgcagtc agcggaattg 1200
gaaaagccca tggtagaaaa gcaggatcaa tccccttcat taaggactgg agaagaaaaa 1260

```

aaagacgtgt ccatttccag actgcgagag gccttttctc ttcgtcacac aacagagaac 1320
 aagcctcaca gcccaagac tccagaacca agaaggagcc ctctaggaca gaaaaggggt 1380
 atgtgtctct ctagcacttc aggtgccatc tctgacaaag gcgtcctgag acctcagaaa 1440
 gaggcagtga gttccagtca cggaccacgt gaccctacgg acagagcgga ggtggagaag 1500
 gactcggggc acggcagcac ttccgtggat tctgaggggt tcagcatccc agacacgggc 1560
 agtcactgca gcagcgagta tgcggccagc tcccaggagg acagggggctc gcaggaaacat 1620
 gtggactctc aggagaaagc gcctgaaact gacgactctt ttctcagatgt ggactgccat 1680
 tcaaaccagg aagataccgg atgtaaattt cgagttttgc ctcagccaac taatctcgca 1740
 accccaaaca caaagcggtt taaaaaagaa gaaattcttt ccagttctga catttgtcaa 1800
 aagttagtaa atactcagga catgtcagcc tctcaggttg atgtagctgt gaaaattaat 1860
 aagaaagtgt tgcccctgga cttttctatg agttctttag ctaaacgaat aaagcagtta 1920
 catcatgaag cacagcaaa gaaaggggaa cagaattaca ggaagtttag ggcaaagatt 1980
 tgtcctggag aaaatcaagc agccgaagat gaactaagaa aagagataag taaaacgatg 2040
 tttagcagaa tggaaatcat tggtcagttt aacctgggat ttataataac caaactgaat 2100
 gaggatattc tcatagtgga ccagcatgcc acggacgaga agtataaact cgagatgctg 2160
 cagcagcaca ccgtgtctca ggggcagagg ctcatagcac ctcagactct caacttaact 2220
 gctgttaatg aagctgttct gatagaaaat ctggaaatat ttagaagaa tggctttgat 2280
 ttgtttatcg atgaaaatgc tccagtcact gaaagggcta aactgatttc cttgccaaact 2340
 agtaaaaact ggaccttcgg accccaggac gtcgatgaac tgatcttcat gctgagcgac 2400
 agccctgggg tcatgtgcgc gccttccga gtcaagcaga tgtttgcctc cagagcctgc 2460
 cggaagtctg tgatgattgg gactgctctt aacacaagcg agatgaagaa actgatcacc 2520
 cacatggggg agatggacca ccctggaac tgtccccatg gaaggccaac catgagacac 2580
 atcgccaacc tgggtgtcat ttctcagaac tgaccgtagt cactgtatgg aataattggt 2640
 ttatctcgag atttttatgt ttgaaagac agagtcttca ctaacctttt ttgttttaaa 2700
 atgaaacctg ctacttaaaa aaaatacaca tcacacccat ttaaaagtga tcttgagaac 2760
 cttttcaaac c 2771

<210> 2826

<211> 3682

<212> DNA

<213> Homo sapiens

<400> 2826

gcgagcgag cggagcctgg agagaaggcg ctgggctgag agggcgcgag ggcgcgaggg
 60

caggggggcaa ccggaccocg ccgcacacca tggcgcccggt cgccgtctgg gccgcgtctg 120
 ccgtcggact ggagctctgg gctcgccgcg acgccttgcc cgccagggtg gcattttacac 180
 cctacgcccc ggagcccggg agcacatgcc ggctcagaga atactatgac cagacagctc 240
 agatgtgctg cagcaaatgc tcgcccggcc aacatgcaaa agtcttctgt accaagacct 300
 cggacaccgt gtgtgactcc tgtgaggaca gcacatacac ccagctctgg aactgggttc 360
 ccgagtgctt gagctgtggc tcccgtgtga gctctgacca ggtggaaact caagcctgca 420
 ctcgggaaca gaaccgcacg tgcacctgca ggcccgggtg gtactgcgcg ctgagcaagc 480
 aggaggggtg ccggctgtgc gcgccgctgc gcaagtgcg cccgggcttc ggctgggcca 540
 gaccaggaac tgaacatca gacgtggtgt gcaagccctg tgccccgggg acgttctcca 600
 acacgacttc atccacggat atttgaggc cccaccagat ctgtaacctg gtggccatcc 660
 ctgggaatgc aagcatggat gcagtctgca cgteccagtc cccaccccg agtatggccc 720
 caggggcagt acacttacc cagccagtgt ccacacgato ccaacacacg cagccaactc 780
 cagaaccag cactgtctca agcacctcct tctgtctccc aatgggcccc agccccccag 840
 ctgaagggag cactggcgac ttcgctcttc cagttggact gattgtgggt gtgacagcct 900
 tgggtctact aataatagga gtggtgaact gtgtcatcat gaccagggtg aaaaagaagc 960
 ccttgtcct gcagagagaa gccaaagggtc ctacttgcc tgccgataag gcccggggta 1020
 cacagggccc cgagcagcag cacctgtgta tcacagccgc gagctccagc agcagctccc 1080
 tggagagctc ggccagtgcg ttggacagaa gggcgccac tcggaaccag ccacaggcac 1140
 caggcgtgga ggccagtggg gccggggagg cccggggcag caccgggagc tcagattctt 1200
 cccctgggtg ccatgggacc cagggtcaatg tcacctgcat cgtgaacgtc tgtagcagct 1260
 ctgaccacag ctacacagtc tctcccaag ccagctccac aatgggagac acagattcca 1320
 gccctcgga gtccccaag gacgagcagg tcccttctc caaggaggaa tgtgcctttc 1380
 ggtcacagct ggagacgcca gagaccctgc tggggagcac cgaagagaag cccctgcccc 1440
 ttggagtgc tgaatgctgg atgaagccca gttaaccagg ccggtgtggg ctgtgtcgta 1500
 gccaaagggt gctgagccct ggcaggatga cctgcgaag gggccctggt cctccaggc 1560
 cccaccact aggaactctga ggctctttct gggccaagtt cctctagtgc cctccacagc 1620
 cgcagcctcc ctctgacctg caggccaaga gcagaggcag cgagtgtgg aaagcctctg 1680
 ctgccatggc gtgtccctct cggaaggctg gctgggcatg gacgttcggg gcattgtggg 1740
 gcaagtccct gactctctgt gacctgcccc gccagctgc acctgccagc ctggctctgt 1800
 gagcccttgg gttttttgtt tgtttgtttg tttgtttgtt tgtttctccc cctgggctct 1860

gccccagctc tggctccag aaaacccag catcctttc tgcagagggg ctttctggag 1920
 aggagggatg ctgctgagt caccatgaa gacaggacag tgcttcagcc tgaggctgag 1980
 actgcgggat ggtcctggg ctctgtgcag ggaggagggt gcagccctgt agggaaacggg 2040
 gtccctcaag ttagctcagg aggcttgga agcatcacct caggccaggt gcagtggctc 2100
 acgcctatga tcccagcact ttgggagggt gaggggggtg gatcacctga ggtaggaggt 2160
 tcgagaccag cctggccaac atggtaaac cccatctcta ctaaaaatac agaaattagc 2220
 cgggcgtggt ggcgggcacc tatagtccca gctactcaga agcctgaggc tgggaaatcg 2280
 tttgaacccg ggaagcggag gttgcaggga gccgagatca cgccactgca ctccagcctg 2340
 ggcgacagag cgagagtctg tctcaaaaga aaaaaaaaag caccgcctcc aaatgccaac 2400
 ttgtcctttt gtaccatggt gtgaaagtca gatgccaga gggcccaggc agggccacct 2460
 attcagtgtg gtggcctggg caagataacg cacttctaac tagaaatctg ccaatttttt 2520
 aaaaagtaa gtaccactca ggccaacaag ccaacgacaa agccaaactc tggcagccac 2580
 atccaacccc ccactgccca ttgcaccct ccgccttcac tccggtgtgc ctgcagcccc 2640
 gcgcctcctt cttgtgtgc ctaggccaca ccatctcctt tcagggaatt tcaggaacta 2700
 gagatgactg agtctctgta gccatctctc tactctacc tcagcctaga ccctcctcct 2760
 ccccagagg ggtgggttcc tcttcccac tcccacett caattcctgg gccccaaacg 2820
 ggctgccctg ccactttggt acatggccag tgtgatccca agtgccagtc ttgtgtctgc 2880
 gtctgtgttg cgtgtcgtgg gtgtgtgtag ccaaggctcg taagttaat ggctgcctt 2940
 gaagccactg aagctgggat tcttccccat tagagtcagc ctccccctc ccaggggcag 3000
 ggccctgcag aggggaaacc agtgtagcct tgcccggatt ctgggaggaa gcaggttgag 3060
 gggctccttg aaaggctcag tctcaggagc atggggataa aggagaaggc atgaaattgt 3120
 ctgacagagc aggggcaggg tgataaatt ttgataaatt ccactggact tgagcttggc 3180
 agctgaacta ttggagggtg ggagagccca gccattacca tggagacaag aagggttttc 3240
 caccctggaa tcaagatgac agactggctg gctgcagtga cgtgcacctg tactcaggag 3300
 gctgagggga gcatcactg agcccaggag ttgaggctg cagcgagcta tgatcgcgcc 3360
 actacactcc agcctgagca acagagttag accctgtctc ttaagaaaa aaaaagtcag 3420
 actgtggga ctggccaggt ttctgcccac attggaccca catgaggaca tgatggagcg 3480
 cactgcccc ctggtggaca gtctggggag aacctcaggc ttccttggca tcacagggca 3540
 gagccgggaa gcgatgaatt tggagactct gtggggcctt ggttcccttg ttgtgtgtgtg 3600
 ttgatcccaa gacaatgaa gtttgactg tatgctggac ggcattcctg cttatcaata 3660
 aacctgtttg ttttaaaaa aa 3682

<210> 2827
 <211> 2400
 <212> DNA
 <213> Homo sapiens

<400> 2827
 taggatggaa aggcagatgt aaagtccttc atggcgaaat ataacacggg gggcaaccgg 60
 acagaggatg tctcagtcaa tagccgaccc ttcagagtca caggggccaaa ctcatcttca 120
 ggaatacaag caagaagaa cttattcaac aaccaaggaa atgccagccc tctctgcagga 180
 cccagcaatg tacctaagtt tgggtcccca aagccacctg tggcagtcaa acctcttctt 240
 gaggaagagc ctgacaagga acccaagccc ccgtttctaa agcccactgg agcaggccaa 300
 agattcggaa caccagccag cttgaccacc agagaccccc aggcgaaagt gggatttctg 360
 aaacctgtag gccccaagcc catcaacttg cccaaagaag attccaaacc tacatttccc 420
 tggcctcctg gaacaagcc atctcttcac agtgtaaac aagaccatga cttaaagcca 480
 ctaggcccgaa aatctggggt tactctcca acctcagaaa atgaacagaa gcaacggttt 540
 cccaaattga ctggggttaa agggaaattt atgtcagcat cacaagatct tgaacccaag 600
 cccctcttcc ccaaacccgc ctttggccag aagccgcccc taagtaccga gaactcccat 660
 gaagacgaaa gcccatgaa gaatgtgtct tcatcaaaa ggtccccagc tcccctggga 720
 gtcaggtcca aaagcggccc tttaaaacca gcaagggaag actcagaaaa taaagaccat 780
 gcaggggaga tttcaagttt gcccttctct ggagtggttt tgaacctgc tgcgagcagg 840
 ggaggcctag gtctctccaa aaatggtgaa gaaaaaaagg aagataggaa gatagatgct 900
 gctaagaaca ccttcagag caaaataaat caggaagagt tggcctcagg gactcctcct 960
 gccaggttcc ctaaggcccc ttctaagctg acagtggggg ggccatgggg ccaaagtcag 1020
 gaaaaggaaa agggagacaa gaattcagcc accccgaac agaagccatt gcctcccttg 1080
 tttaccttgg gtccacctcc accaaaacc aacagaccac caaatgttga cctgacgaaa 1140
 ttccacaaaa cctcttcttg aaacagtact agcaaaagcc agacgtctta ctcaacaact 1200
 tccctgccac cacctccacc atcccatccg gccagccaac caccattgcc agcatctcac 1260
 ccatcacaac caccagtccc aagcctacct cccagaaaca ttaaactccc gtttgacctt 1320
 aaaagccctg tcaatgaaga caatcaagat ggtgtcacgc actctgatgg tgctggaaat 1380
 ctatgatgag aacaagacag tgaaggagaa acatatgaag acatagaagc atccaaagaa 1440
 agagagaaga aaagggaaaa ggaagaaaag aagagggttag agctggagaa aaaggaacag 1500
 aaagagaaag aaaagaaaa acaagaaata aagaagaaat ttaaactaac aggccttatt 1560
 caagtcattc atcttgcaaa agcttggtgt gatgtcaaag gaggaagaaa tgaactgagc 1620

ttcaagcaag gagagcaaat tgaatcatc cgcacacag acaaccaga aggaaatgg	1680
ttgggcagaa cagcaagggg ttcatatggc tatattaaa caactgctgt agagattgac	1740
tatgattctt tgaaactgaa aaaagactct cttggtgccc ctccaagacc tattgaagat	1800
gaccaagaag tatatgatga tgttgacagag caggatgata ttagacagca cagtcagagt	1860
ggaagtggag ggatattccc tccaccacca gatgatgaca tttatgatgg gattgaagag	1920
gaagatgctg atgatgggtt cctgctcct cctaaacaat tggacatggg agatgaagtt	1980
tacgatgatg tggatacttc tgatttcctt gtttcatcag cacagatgag tcaaggaaact	2040
aattttggaa aagctaagac agaagaaaag gacctaaga agctaaaaaa gcaggaaaaa	2100
gaagaaaaag acttcaggaa aaaatttaaa tatgatgggtg aaattagagt cctatatcca	2160
actaaagtta caactccat aacttctaaa aagtggggaa ccagagatct acaggtaaaa	2220
cctgggtgaat ctctagaagt tatacaaacc acagatgaca caaaagtctc ctgcagaaat	2280
gaagaaggga aatatgggta tgtccttcgg agttacctag cggacaatga tggagagatc	2340
tatgatgata ttgctgatgg ctgcacttat gacaatgact agcactcaac tttggtcatt	2400

<210> 2828

<211> 2015

<212> DNA

<213> Homo sapiens

<400> 2828

cggaggcacg gaagatgagg aagatgatca ggaggatgat gaaggtgaag agggagatga	60
agacgatgac gacgatggct ctgaggggac ctacggggct gccagctgg gggggcgctc	120
aagctcgag gatccgggct gcccgcgaga cgaggagcgg gccccaggat ggggtcgatg	180
aagtccaagt tcctccaggt cggaggcaat acattctcaa aaactgaaac cagcgccagc	240
ccacactgtc ctgtgtactg gccggatccc acatccacca tcaagccggg gcctaatagc	300
cacaacagca acacaccagg aatcaggggag gcaggctctg aggcacatcat cgtgggtgcc	360
ctgtatgatt acgaggccat tcaccacgaa gacctcagct tcagaaggg ggaccagatg	420
gtggtcctag aggaatccgg ggagtgggtg aaggctcgat ccttgccac ccggaaggag	480
ggctacatcc caagcaacta tgtcgccgc gttgactctc tggagacaga ggagtgggtt	540
ttcaagggca tcagccggaa ggacgcagag cgccaactgc tggctcccg caacatgctg	600
ggctccttca tgatccggga tagcgagacc actaaaggaa gctactctt gtccgtcgca	660
gactacgacc ctccggcagg agataccgtg aaacattaca agatccggac cctggacaac	720
gggggcttct acatatccc ccgaagcacc ttcagcactc tgcaggagct ggtggaccac	780
tacaagaagg ggaacgcagg gctctgccag aaactgtcgg tgccctgcat gtcttccaag	840

cccccaagc cttgggagaa agatgcctgg gagatccctc gggaaatccct caagctggag 900
 aagaaacttg gagctgggca gtttggggaa gtctggatgg ccacctacaa caagcacacc 960
 aaggtggcag tgaagacgat gaagccaggg agcatgtcgg tggaggccctt cctggcagag 1020
 gccaacgtga tgaaaactct gcagcatgac aagctgggtca aacttcacgc ggtgggtcacc 1080
 aaggagccca tctacatcat cacggagttc atggccaaag gaagcttgct ggactttctg 1140
 aaaagtgatg agggcagcaa gcagccattg ccaaaactca ttgacttctc agcccagatt 1200
 gcagaaggca tggccttcac cgagcagagg aactacatcc accgagacct ccgagctgcc 1260
 aacatcttgg tctctgcac cctggtgtgt aagattgtct actttggcct ggcccgggtc 1320
 attgaggaca acgagtacac ggctcgggaa ggggccaagt tccccacaa gtggacagct 1380
 cctgaagcca tcaacttttg ctccctcacc atcaagtcag acgtctggct ctttgggtac 1440
 ctgtgtatgg agatcgtcac ctacggccgg atcccttacc cagggatgtc aaacctgaa 1500
 gtgatccgag ctctggagcg tggataccgg atgcctcgcc cagagaactg ccagaggag 1560
 ctctacaaca tcatgatgcg ctgttgga aaacgtccgg aggagcggcc gaccttcgaa 1620
 tacatccaga gtgtgctgga tgacttctac acggccacag agagccagta ccaacagcag 1680
 ccatgatagg gaggaccagg gcagggcagg ggggtcccag gtggtggctc gaaggtggct 1740
 ccagaccat ccgccaggcg ccacaccccc ttctactcc cagacaccca ccctcgcttc 1800
 agccacagtt tctcatctg tccagtgggt aggttggtact ggaatatctc tttttgactc 1860
 ttgcaatcca caatctgaca ttctcaggaa gcccccaagt tgatatctct atttctctgga 1920
 atggttgat ttagttaca gctgtgattt ggaagggaaa ctttcaaat agtgaatatga 1980
 atatttaaat aaaagatata aatgcaagtc ttacg 2015

<210> 2829

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2829

agcagtcct tcttttctct actgcagctc ttttcatctt gccatctctt tccagctcca 60
 tgatggttct gcaggtttct ggcggccccc ggacagtggc tctgacggcg ttactgatgg 120
 tgctgctcac atctgtggct cagggcaggg ccaactccaga gaattacctt ttccagggac 180
 ggaggaatg ctacgcgttt aatgggacac agcgcttctc ggagagatac atctacaacc 240
 gggaggagtt cgcgcgttc gacagcgacg tgggggagtt ccgggcggtg acggagctgg 300
 ggcggcctgc tgcggagtag tggaaacagc agaaggacat cctggaggag aagcgggcag 360
 tgccggacag gatgtgcaga cacaactacg agctgggcgg gcccatgacc ctgcagcgcc 420

```

gagtcacgcc taggggtgaat gtttccccct ccaagaagg ggccttgacg caccacaacc 480
tgcttgctctg ccacgtgacg gatttctacc caggcagcat tcaagtccga tgggttctga 540
atggacagga ggaacacgct ggggtcgtgt ccaccaacct gatccgtaat ggagactgga 600
ccttcacgat cctgggtgatg ctggaaatga cccccacga gggagatgtc tacacctgcc 660
aagtggagca caccagcctg gatagtcctg tcaccgtgga gtggaaggca cagtctgatt 720
ctgcccgag taagacattg acgggagctg ggggcttcgt gctggggctc atcatctgtg 780
gagtgggcat cttcatgcac aggaggagca agaaagttca acgaggatct gcataaacag 840
ggttcctgag ctactgaaa agactattgt gccttaggaa aagcatttgc tgtgttctgt 900
tagcatctgg ctccaggaca gacctcaac ttccaaattg gatactgctg ccaagaagtt 960
gctctgaagt cagtttctat cattctgctc tttgattcaa agcactgttt ctctcactgg 1020
gcctccaacc atgttccctt cttcttagca ccacaaataa tcaaaaccca acatgactgt 1080
ttgttttctt ttaaaaatat gcaccaaacc atctctcctc acttttctct gaggggttta 1140
gtagacagta ggagttaata aagaagttca ttttggttta aacataggaa agaagagaac 1200
catgaaaatg gggatatgtt aactattgta taatggggcc tgttacacat gacactcttc 1260
tgaattgact gtatttcagt gagctgcccc caaatcaagt ttagtgccct catccattta 1320
tgtctcagac cactattctt aactattcaa tggtgagcag actgcaaacc tgccctgatag 1380
gacccatatt cccacagcac taattcaaca tataccttac tgagagcatg ttttatcatt 1440
accattaaga agttaaatga acatcagaat ttaaaatcat aaatataacc taatacactt 1500
t 1501

```

<210> 2830

<211> 1932

<212> DNA

<213> Homo sapiens

<400> 2830

```

atgcaggccc caccggagct cgcggtgggc atcgacctgg gcaccaccta ctcggtcggtg 60
ggcgtgttct agcaggggccg cgtggagatc ctggccaacg accaggggcaa ccgcaccacg 120
cccagctacg tggccttcac cgacaccgag cggctggctg gggacgcggc caagagccag 180
gcggccctga acccccacaa caccgtgttc gatgccaaag ggcctgatcg gcgcaagttc 240
gcggacacca cgggtgcagtc ggacatgaag cactggccct tccgggtggg gagcgagggc 300
ggcaagccca aggtgccggc atcgtaaccg ggggaggaca agacgttcta ccccgaggag 360
atctcgtcca tgggtcgtg caagatgaag gagacggcgg aggcgtacct gggccagccc 420
gtgaagcacg cagtgtcac cgtgcccgcc tatttcaatg actcgcagcg ccaggccacc 480

```

aaggacgcgg gggccatcgc ggggctcaac gtgttgccga tcatcaatga gccacgcgga 540
gctgccatcg cctatgggct ggaccgcgcg ggcgcgggag agcgcaacgt gctcattttt 600
gacctgggtg ggggcacctt cgatgtgtcg gttctctcca ttgacgctgg tgtctttgag 660
gtgaaagcca ctgctggaga taccacctg ggaggagagg acttcgacaa ccggctcgtg 720
aaccacttca tggagaatt ccggcggaag catgggaagg acctgagcgg gaacaagcgt 780
gccctcggca ggctgcgcac agcctgtgag cgcgccaaag gcacctgtc ctccagcacc 840
caggccaccc tggagataga ctccctgttc gagggcgtgg acttctacac gtccatcact 900
cgtgcccgct ttgaggaaat gtgtcagac ctcttcgcga gcacctgga gccggtggag 960
aaggccctgc gggatgccaa gctggacaag gccagatcc atgacgtcgt cctggtgggg 1020
ggctccactc gcatacccaa ggtgcagaag ttgctgcagg acttcttcaa cggcaaggag 1080
ctgaacaaga gcatcaaccc tgatgaggct gtggcctatg gggtgtgtgt gcaggcggcc 1140
gtgttgatgg gggacaaatg tgagaaagt caggatctcc tgcgtctgga tgtggtccc 1200
ctgtctctgg ggctggagac agcaggtggg gtgatgacca cgctgatcca gaggaacgcc 1260
actatcccca ccaagcagac ccagacttcc accacctact cggacaacca gcctggggtc 1320
ttcatccagg tgtatgaggg tgagagggcc atgaccaagg acaacaacct gctggggcgt 1380
tttgaactca gtggcatccc tcctgcccc cgtggagtcc ccagataga ggtgaccttt 1440
gacattgatg ctaatggcat cctgagcgtg acagccactg acaggagcac aggtaaggct 1500
aacaagatca ccatcaccaa tgacaagggc cggctgagca aggaggagggt ggagaggatg 1560
gttcataga cagagcagta caaggctgag gatgaggccc agagggacag agtggtctgcc 1620
aaaaactcgc tggaggccca tgtcttccat gtgaaagggt ttttgcaaga gaaagcctt 1680
agggacaaga ttcccgaaga ggacaggcgc aaaatgcaag acaagtgtcg ggaagtctt 1740
gcctggctgg agcacaacca gctggcagag aaggaggagt atgagcatca gaagaggag 1800
ctggagcaaa tctgtcgcct catcttctcc aggtctctatg gggggcctgg tgtccctggg 1860
ggcagcagtt gtggcactca agcccgccag ggggacccca gcaccgccc catcattgag 1920
gaggttgatt ga 1932

<210> 2831

<211> 2035

<212> DNA

<213> Homo sapiens

<400> 2831

cgagccccgc cgaaccgagg ccacccggag ccgtgcccg tccacgcgg ccgtgcccg 60
cggccttaag aaccaggcaa cctctgcctt ctccctctt ccactcggag tcgcgtccg 120

cgcgccctca ctgcagcccc tgcgtcgccg ggaccctcgc gcgcgaccag ccgaatcgct	180
cctgcagcag agccaacatg cccatcactc ggtgcgcat gagaccctgg ctgagatgac	240
agattaattc caaccaaatt ccggggctca tctggattaa taaagaggag atgatcttcc	300
agatcccatg gaagcatgct gccaaagcat gctgggacat caacaaggat gcctgtttgt	360
tccggagctg ggccattcac acaggccgat acaaagcagg ggaaaaaggag ccagatccca	420
agacgtggaa ggccaacttt cgctgtgcc tgaactccct gccagatgc gaggaggtga	480
aagaccagag caggaaacag ggcagctcag ctgtgcgagt gtaccggatg cttccacctc	540
tcaccaagaa ccagagaaaa gaaagaaagt cgaagtccag ccgagatgct aagagcaagg	600
ccaagaggaa gtcattgtgg gattccagcc ctgatactt ctctgatgga ctccagcagc	660
ccactctgcc tgatgaccac agcagctaca cagttccagg ctacatgcag gacttgagg	720
tgaggcaggc cctgactcca gcactgtgc catgtgctgt cagcagcact cccccgact	780
ggccatcccc agtggaaagt gtgccggaca gcaccagtga tctgtacaac ttccaggtgt	840
cacccatgcc ctccacctt gaagctacaa cagatgagga tgaggaaagg aaattacctg	900
aggacatcat gaagctcttg gagcagtcgg agtggcagcc aacaaacgtg gatgggaagg	960
ggtacctact caatgaacct ggagtccagc ccacctctgt ctatggagac tttagctgta	1020
aggaggagcc agaattgac agcccagggg gggatattgg gctgagtcta cagcgtgtct	1080
tcacagatct gaagaacatg gatgccacct ggctggagac cctgctgacc ccagtcgggt	1140
tgccctccat ccaggccatt ccctgtgcac cgtagcaggg ccctggggcc cctcttatcc	1200
ctctaggcaa gcaggacctg gcatcatggt ggatatgggt cagagaagct ggacttctgt	1260
gggcccctca acagccaagt gtgacccac tgccaagtgg ggtggggcct cctctcttgg	1320
gtcattgacc tctcagggcc tggcaggcca gtgtctgggt tttctctgtg gtgtaaagct	1380
ggcctgctc cctgggaaga tgagggtctg agaccagtgt atcagggtcag ggaacttgag	1440
aggagtcagt gtctggcttt tctctctgag ccagctgcc tggagagggg ctgctgtca	1500
ctggctggct cctaggggaa cagaccagtg accccagaaa agcataacac caatccagg	1560
gctggctctg cactaagcga aaattgcact aaatgaatct cgttccaaag aactaccct	1620
tttcagctga gcctctggga ctgttccaaa gccagtgaat gtgaaggaaa ctcccctct	1680
tcggggcaat gtcctctcag cctcagagga gctctaccct gctccctgct ttggctgagg	1740
ggcttgggaa aaaaacttgg cactttttcg tgtggatctt gccacatttc tgatcagagg	1800
gttactacta catttcccc gagctcttgg cctttgcatt tatttatata gtgccttgc	1860
cggggccac caccctctca agcccagca gccctcaaca ggcccaggga gggaagtgtg	1920

agcgcccttg tatgacttaa aattggaat gtcactaac cattaagtca tgtgtgaaca 1980

cataaggacg tgtgtaataa tgtacatttg tctttttata aaaagtaaaa ttgtt 2035

<210> 2832
 <211> 4068
 <212> DNA
 <213> Homo sapiens

<400> 2832
 gaattcctcc tctcttcacc ccgttagctg ttttcaatgt aatgctgccg tccttctctt 60
 gcactgcctt ctgcgctaac acctccattc ctgtttataa ccgtgtatgt attacttaaat 120
 gtatataatg taatgttttg taagttatta atttatatat ctaacattgc ctgccaatgg 180
 tgggtgttaaa tttgtgtaga aaactctgcc taagagttac gactttttct tghtaatgtt 240
 tgtattgtgt attatataac ccaaactgca cttagtagag acatatggcc cccttggcag 300
 agaggacagg ggtgggcttt tgttcaaagg gtctgccctt tcctctgctg agttgctact 360
 tctgcacaac ccctttatga accagtttcc acccgaattt tgactgtttc atttagaaga 420
 aaagcaaaa gagaaaaagc tttcctcatt tctccttgag atggcaaaag actcagaaat 480
 gacatcacat accctaaga accctgggat gactaaggca gagagagtct gagaaaactc 540
 tttgggtgct ctgcctttag ttttaggaca catttatgca gatgagctta taagagaccg 600
 ttccctccgc cttcttctcc agaggaaagt tcttggtaga tcaccgacac ctcatccagg 660
 cgggggggtg gggggaaaact tggcaccagc catcccaggc agagcaccac tgtgatttgt 720
 tctcctgtgt gagagagctg gaaggaaagg gccagcgtgc aaataatgaa ggagcacggg 780
 ggacacctca gtacgaccgg aatcagcggg ggtagcgtg actctgctat ggacagcctg 840
 cagcgcctcc agcctaacta catgcctgtg tgtttgtttg cagaagaatc ttatcaaaaa 900
 ttagcaatgg aaacgtgga ggaattagac tgggtgttag accagctaga gaccatacag 960
 acctaccggt ctgtcagtga gatggcttct aacaagtcca aaagaatgct gaaccgggag 1020
 ctgacacacc tctcagagat gagccgatca ggggaaccagg tgtctgaata catttcaaat 1080
 actttcttag acaagcagaa tgatgtggag atcccatctc ctaccagaa agacagggag 1140
 aaaaagaaaa agcagcagct catgaccag ataagtggag tgaagaaatt aatgcatagt 1200
 tcaagcctaa acaatacaag catctcacgc tttggagtca aactgaaaa tgaagatcac 1260
 ctggccaagg agctggaaga cctgaacaaa tggggctcta acatctttaa tgtggctgga 1320
 tattctcaca atagaccctt aacatgcac atgtatgcta tattccagga aagagacctc 1380
 ctaagacat tcagaatctc atctgacaca ttataacct acatgatgac tttagaagac 1440
 cattaccatt ctgacgtggc atatcacaac agcctgcagc ctgctgatgt agcccagctg 1500

acccatgttc tcccttctac accagcatta gacgctgtct tcacagattt ggagatcctg 1560
 gctgccattt ttgcagctgc catccatgac gttgatcctc ctggagtctc caatcagttt 1620
 ctcatcaaca caaattcaga acttgctttg atgtataatg atgaatctgt gttggaaaaat 1680
 catcaccttg ctgtgggttt caaactgctg caagaagaac actgtgacat cttcatgaat 1740
 ctccaccaaga agcagcgtca gacactcagg aagatgggta ttgacatggg gtagcaact 1800
 gatatgtcta aacatatgag cctgctggca gacctgaaga caatggtaga aacgaagaaa 1860
 gttacaagt caggcgttct tctctagac aactatacgg atcgattca ggtccttcgc 1920
 aacatggtag actgtgcaga cctgagcaac cccaccaagt ccttgaatt gtatcgga 1980
 tggacagacc gcacatgga ggaattttc cagcaggag acaagagcgg ggagagggga 2040
 atggaaatta gcccaatgtg tgataaacac acagcttctg tggaaaaatc ccaggttggt 2100
 ttcacgact acattgtcca tccattgtgg gagacatggg cagatttggt acagcctgat 2160
 gctcaggaca ttctcgata cttagaagat aacaggaact ggtatcagag catgatacct 2220
 caaagtccct caccaccact ggacgagcag aacagggact gccagggtct gatggagaag 2280
 tttcagtttg aactgactct cgatgaggaa gattctgaag gacctgagaa ggaggggagag 2340
 ggacacagct atttcagcag cacaaagacg ctttgtgtga ttgatccaga aaacagagat 2400
 tccctgggag agactgacat agacattgca acagaagaca agtccccctg ggatacataa 2460
 tccccctctc cctgtggaga tgaacattct atccttgatg agcatgccag ctatgtggta 2520
 gggccagccc accatggggg ccaagacctg cacaggacaa gggccacctg gcctttcagt 2580
 tacttgagtt tggagtcaga aagcaagacc aggaagcaaa tagcagctca ggaatccca 2640
 cgggtgactt gccttgatgg caagcttggt ggagagggct gaagctgttg ctgggggccc 2700
 attctgatca agacacatgg cttgaaaatg gaagacacaa aactgagaga tcattctgca 2760
 ctaagtttgc ggaacttato cccgacagt actgaactca ctgactaata acttcattta 2820
 tgaatcttct cacttgctcc ttgtctgcc aacctgtgtg ccttttttgt aaaacatttt 2880
 catgtcttta aaatgcctgt tgaatacctg gagtttagta tcaacttcta cacagataag 2940
 ctttcaaagt tgacaaactt ttttgactct ttctggaaaa gggaaagaaa atagtcttcc 3000
 ttctttcttg ggcaatatcc ttcactttac tacagttact ttgcaaaca gacagaaagg 3060
 atacacttct aaccacattt tacttcttcc cctgtttgct cagtccaact ccacagtca 3120
 tcttaaaact tctctctgtt tgcctgcctc caacagtact ttaactttt tgctgtaaac 3180
 agaataaaa tgaacaaatt agggggtaga aaggagcagt ggtgtcgttc accgtgagag 3240
 tctgcataga actcagcagt gtgccctgct gtgtcttggc cctgcccc caccaggagt 3300
 gctacagtcc ctggccctgc ttccatcct cctctcttca cccggttagc tgttttcaat 3360

```

gtaatgctgc cgctcctctc ttgcactgcc ttctgcgcta acacctccat tctgttttat 3420
aacctgtgat ttattactta atgtatataa tgtaatgttt tgtaagttat taatttatat 3480
atctaacatt gcctgccaat ggtggtgtta aatttgtgta gaaaactctg cctaagagtt 3540
acgacttttt cttgtaatgt ttgtatttgt gtattatata acccaaacgt cacttagtag 3600
agacatatgg cccctctggc agagaggaca ggggtgggct ttgttcaaa gggctctgcc 3660
tttccctgcc tgagttgcta ctctgcaca acccctttat gaaccagttt tggaaacaat 3720
attctcacat tagatactaa atgggtttata ctgagtcctt tacttttgta tagcttgata 3780
ggggcagggg caatgggatg tagtttttac ccaggttcta tccaaatcta tgtgggcatg 3840
agttgggtta taactggatc ctactatcat tgtggcttg gttcaaaagg aaacactaca 3900
tttgcacaca gatgattctt ctgattcttc tgaatgtcc cgaactactg actttgaaga 3960
ggtagcctcc tgccctccat taagcaggaa tgtcatgttc cagttcatta caaaagaaaa 4020
caataaaaca atgtgaattt ttataataaa aaaaaaaaaa aggaattc 4068

```

```

<210> 2833
<211> 664
<212> DNA
<213> Homo sapiens

```

```

<400> 2833
ggattgttg tctgcgtgga acttctcagg tggacaccag agcatggaac acatccacga 60
cagcgatggc agttccagca gcagccacca gagcctcaag agcacagcca aatggcgggc 120
atccctggag aatctgctgg aagaccaga aggcgtgaaa agatttaggg aatttttaaa 180
aaaggaattc agtgaagaaa atgttttggt ttggctagca tgtgaagatt ttaagaaaat 240
gcaagataag acgcagatgc aggaaaaaggc aaaggagatc tacatgacct ttctgtccag 300
caaggcctca tcacagggtc acgtggaggg gcagctcagg ctcaacgaga agatcctgga 360
agaaccgcac cctctgatgt tccagaaact ccaggaccag atctttaatc tcatgaagta 420
cgacagctac agcgcgtctt ttaagtctga cttgttttta aaacacaagc gaaccgagga 480
agaggaagaa gatttgcctg atgctcaaac tgcagctaaa agagcttcca gaatttataa 540
cacatgagcc cccaaaaagc cgggactggc agctttaaga agcaaaggaa tttcctctca 600
ggacgtgccg ggtttatcat tgctttgtta ttgtgaagga ctgaaatgta caaaaccctt 660
caat 664

```

```

<210> 2834
<211> 615
<212> DNA
<213> Homo sapiens

```

<400> 2834
 gctcagagag aagtgacttt gagctcacag tgtcaccgcc tgctgatggg agagetgaat 60
 tcaaaaccag ggtgtctccc tgagcagagg gacctgcaca cagagactcc ctccctgggct 120
 cctggcacca tggccccact gaagatgctg gccctggcca ccctcctcct gggggcttct 180
 ctgcagcaca tccacgcagc tcgagggacc aatgtgggcc gggagtgtg cctggagtac 240
 ttcaagggag ccattcccct tagaaaagctg aagacgtggt accagacatc tgaggactgc 300
 tccagggatg ccactgtttt tgtaactgtg cagggcaggg ccactgttc ggacccaac 360
 aacaagagag tgaagaatgc agttaaatc ctgcaaagcc ttgagagtc ttgaagcctc 420
 ctacccccag actcctgact gtctcccggt actacctggg acctccaccg ttggtgttca 480
 cgcccccac cctgagcgcc tgggtccagg ggagccctc cagggacgaa gaagagccac 540
 agtgaggag atccccatc cttgtctgaa ctggagccat gggcacaaag ggccccagatt 600
 aaagtcttta tctct 615

<210> 2835
 <211> 885
 <212> DNA
 <213> Homo sapiens

<400> 2835
 agcctacgca cgaaagtgc tagggaggaa ggatattata aagtgatgca aacagaaatt 60
 ccaccagcct ccattgatca tcatgtgtca taactcagtc aagctcagtg agcattctca 120
 gcacattgcc tcaacagctt caaggtgagc cagctcaaga ctttgctctc caccaggcag 180
 aagatgacag actgtgaatt tggatatatt tacaggctgg ctccaggacta tctgcagtg 240
 gtcctacaga taccacaacc tggatcaggt ccaagcaaaa cgtccagagt gctacaaaat 300
 gttgcgttct cagtcaaaa agaagtggaa aagaatctga agtcatgctt ggacaatgtt 360
 aatgttgtgt ccgtagacac tgccagaaca ctattcaacc aagtgatgga aaaggagttt 420
 gaagacggca tcattaactg gggagaatt gtaaccatat ttgcatttga aggtattctc 480
 atcaagaac ttctacgaca gcaaattgcc ccggatgtgg atacctataa ggagatttca 540
 tattttgttg cggagttcat aatgaataac acaggagaat ggataaggca aaacggaggc 600
 tgggaaaatg gctttgtaaa gaagtttgaa cctaaatctg gctggatgac ttttctagaa 660
 gttacaggaa agatctgtga aatgctatct ctccctaagc aatactgttg accagaaagg 720
 aactccata ttgtgaaacc ggccataatt ttctgactga tatggaaacg attgccaaca 780
 catacttcta cttttaataa aacaactttg atgatgtaac ttgaccttcc agagttatgg 840
 aaattttctc cccatgtaat gaataaattg tatgtatttt tctct 885

<210> 2836
 <211> 1875
 <212> DNA
 <213> Homo sapiens

<400> 2836
 aaagcatcca gttcctttgc ggtcctcttc ttcagcacat gccaaagctg ttcctcacgg 60
 cctgtgagac aagagcatct tggatgtagg acaatggaag agttagatgc cttattggag 120
 gaactggaac gctccacctc tcaggacagt gatgaatatt ccaaccagc tcctcttccc 180
 ctggatcagc attccagaaa ggagactaac cttgatgaga cttcggagat cctttctatt 240
 caggataaca caagtccttc gccggcgag ctcgtgtata ctaccaatat ccaggagctc 300
 aatgtctaca gtgaagccca agagccaaag gaatcaccac cactttctaa aacgtcagca 360
 gctgctcagt tggatgagct catggctcac ctgactgaga tgcaggccaa ggttgtagtg 420
 agagcagatg ctggcaagaa gcacttacca gacaagcagg atcacaaggc ctccctggac 480
 tcaatgcttg ggggtctgga gcaggaattg caggaccttg gcattgccac agtgcccaag 540
 ggcattgtg catcctgcc aaaaccgatt gctgggaagg tgatccatgc tctaggggaa 600
 tcatggcacc ctgagcattt tgtctgtact cattgcaaag aagagattgg ctccagtccc 660
 ttctttgagc ggagtggctt ggctactctg cccaacgact accaccaact tttttctcca 720
 cgctgtgctt actgcgctgc tcccatcctg gataaagctg tgacagcaat gaaccagacc 780
 tggcacccag agcactttct ctgctctcac tgcggagagg tgtttgtgac agaaggcttt 840
 catgagaagg acaagaagcc atattgccga aaggatttct tagccatgtt ctcaccaag 900
 tgtggtggct gcaatcgccc agtgttgga aactacctt cagccatgga cactgtctgg 960
 caccagagct gctttgttg tggggactgc ttcaccagtt tttctactgg ctcttcttt 1020
 gaactggatg gacgtccatt ctgtgagctc cattaccatc accgcccggg aacgctctgc 1080
 catgggtgtg ggcagcccat cactggccgt tgtatcagtg ccatggggta caagttccat 1140
 cctgagcact ttgtgtgtgc tttctgctg acacagttgt cgaagggcat ttcaggagg 1200
 cagaatgaca agacctattg tcaacctgc tcaataagc tcttccact gtaatgccaa 1260
 ctgatccata gcctcttcag attccttata aaatttaaac caagagagga gaggaaaggg 1320
 taaattttct gttactgacc ttctgcttaa tagtcttata gaaaaaggaa aggtgatgag 1380
 caaataaagg aactcttaga ctttacatga ctaggctgat aatcttattt tttaggcttc 1440
 tatacagtta attctataaa ttctctttct cctctctctc tccaatcaag cacttgagtg 1500
 tagatctagg tcctctctac tcgtccctct acagatgtat ttccacttg cataattcat 1560
 gccaacactg gttttcttag gtttctccat tttcacctct agtgatggcc ctactcatat 1620

cttctctaata	ttggctcctga	tacttggttc	ttttcacggt	ttcccatgtg	cctgtgggt	1680
caactgtctta	caatcactgc	tgtggaatca	tgataccact	tttagctctt	tgcatcttcc	1740
ttcagtgtat	ttttgttttt	caagaggaag	tagattttta	ctggacaact	ttgagtactg	1800
acatcattga	taaataaact	ggcttggtgt	ttcaataaaa	aaaaaaaaaa	aaaaaaaaaa	1860
aaaaaaaaaa	aaaaa					1875

<210> 2837

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 2837

gaccacggt	atcgatgtcg	acccacagga	ttgtcacaga	gggcagggtg	gtgactgagg	60
accagctcct	catgcttgag	gctgtggtga	tgacacctcg	gatccgctct	gccccgtgtg	120
tcttgggcat	ggagggtcag	cagggtcatcc	tgacactgcc	cctatcccag	aaggggccct	180
tctggacatg	ggagcctagt	gccccctgaa	ctctgctcca	ggtcctacag	gatccagccc	240
tgaagacct	cgctectcacc	tgtcccccac	tgccctggca	ttccctgatc	ctgcggcccc	300
agtatgagat	ccaagccatc	atgcacatgc	gcaggaccat	tgtaagatc	ccttctaccc	360
tggagggtcga	cgtggaggag	gtcacgcct	cctcccggca	cgccactttt	atcaaacgcg	420
tgctgctgag	cgagggtcctg	gcttggaag	gccctttccc	cctgtccatg	gagatcctgg	480
aggttctctga	gggcgcgcgc	atcttctctca	gcccgtgggt	gggtcctctg	caaaaaggcc	540
agaggctttg	cgtctatggc	ctagcctcac	caccctggcg	ggtcctggcc	tcaagcaagg	600
gccgcaagg	gccaggcac	ttcctggtgt	cagggggcta	ccaaggcaag	ctgcggcgcc	660
ggccaaggga	gttccccacg	gcctatgacc	tcctagggtgc	tttcagcca	ggccggccac	720
tcgggtggt	ggccacaaag	gactgtgagg	gcgagaggga	ggagaatccc	gagttcacgt	780
ccctggtctgt	gggtgaccgg	ctggagggtgc	tggggcctgg	ccaggcccat	ggggcccagg	840
gcagtgcagt	ggatgtcttg	gtttgtcagc	ggctgagtga	ccaggctggg	gaagatgagg	900
aggaagagt	caaagaggag	gcagagaccc	agagcgggtc	ctgctgcctt	tcacttccc	960
tggcagtttc	gtgaggagga	tgagtgcagc	ccggcgctac	agcctggcag	atctgactgc	1020
ccagttttca	atgccttggt	aggtaagggt	ggtggccaag	gacaccagcc	accccaatga	1080
ccctcagaac	ctccttctcg	ggcctgcggc	tggaggagaa	gatcacagag	ccattcttgg	1140
tggtagacct	ggactctgag	ctgggatgtg	ctttgagatc	cctccccgga	ggctggacct	1200
gactgtctgt	gaggccaagg	ggcagccaga	cttgccagag	gggtctctcc	ccatagccac	1260
agtgaggagaa	gctggaacac	acacctttta	ttattgtctt	cggaagttac	cagcctgtga	1320

gatccaagcc cccccacca ggcctccctaa aaatcagggc ctcagcaagc agaggagaca 1380
 cagcagtgag ggaggcgta agtcttctca agtcttagga ttgcagcaac acgttcggct 1440
 gcccacaccc aaggcgaaga ccttgccaga gttcatcaag gatggctcca gtacgtacag 1500
 caagattcct gccacagga agggccacag gcccgctaag ccccaaaggc aggatctaga 1560
 tgatgatgaa catgattatg aagaaatact tgagcaattt cagaaaacca tctaagtgtc 1620
 ggaggaaacca cgcttctctaa ctgctgcttc tcagggaatc cgacaccagc caaccatttt 1680
 aagcctctaa aagacctcg gcaagtctca cagaaactga gctgcagacg gggagtagct 1740
 ttgtggaac tgatttgatg gacactgcac cagcttctct caggttctag attcttgcta 1800
 cttaggcggt gctggttttg acctaacatc tcgcacgtga ctccctcagc ctcagagcct 1860
 tgggatgcag agcagctggc agggttcttc tcaatctgc aacccagct gtcccaccgg 1920
 tggatgcaga ggggaatccg agggcatcaa ccttggtgac agcagcgcag tgccaatgct 1980
 gatcacactg catgggagat ttgtttaacg tctgccacc ccactctcac cccaagctc 2040
 taagcccccg ggaggcctgg actgtcttcc tcatctctgt agcaccaagc ctgatagatc 2100
 tgtatatggt aaacaggggt ttaaccacat gtgggtaaca tggattaatg tgggaatttg 2160
 gcttcaagaa cacaacctta ggaccttggg ccccaaaagc tgggtggtgaa atgagaggag 2220
 ccaatttaag aagacctta tggagacctg aggctgcaga aactggtagg ttctcatcagg 2280
 tgggtaaagt cgtcaaagt gtaagtact aaccaagatt atttcatttt aaaccacag 2340
 aataaaaatg acacctgagc ttctcc 2366

<210> 2838

<211> 6383

<212> DNA

<213> Homo sapiens

<400> 2838

cgcgccgct atatataatg cagcatcaca ccatgtaggc catttactct tattttatac 60
 attcagatat gtttgaaca ttcttaaggc taaaaaacag aacatagaaa aataaacagg 120
 aatatattca acacttaca aaagtgatat gataaagaat ataaagtact agtttctctt 180
 taacacttca aaagatatgt atatatactt ttttttaca gtaacatcac aaatgctcac 240
 atcttcacat gctcttaag tattatttgt actcagtga aggtatttat cgtttttcat 300
 acataaaatt ttctagctct gtaacacaat gcaattttta atccattcaa gtaagttcaa 360
 ccccaaagt gccgcttccc agcatthaaga catgcacca cccctcttct aagattttct 420
 aaacttgtat ttccgggaga aagacctctt ttaaaaaata atccaattag tgggagagta 480
 aatggctgac attagtagca aaaccttagt tatctgaaaa taacatattg gaaatgagac 540

attattagga ttttaaacaa acaatagcat ttagacataa agtaggaagc aaaatacagt	600
aaacagaaat agtgtagcca aatatcattc tcttcagcta ccttaagtaa aagacaaaac	660
atttacctca tctaaaaatg aagggtaaaac gaaagaggca aaaataaata ttgctgattt	720
ctaggatggc tgaatgtttt ctaaaccaga aatggttaga aagggaacttt attgcacca	780
gtcaatcata agcaagtttg cagttcacag gcattttaat tcaaccttga gtcacaaagg	840
agaacaacac gctgcgagaa tacagtctac agtctgcatt aaataagaat atatcagcat	900
tgtggtctgg gaaaacctat gcttgccagg acaaggcagg gtgctgagct taggtcatgc	960
catgaaaatg aatttgtggg ttatcagtaa acagtatgag gactacacag atgccagcat	1020
cctgctgcca aggagacatg gggcaagagt tgaagatttg agaggaaatg aagagacata	1080
cacaacacca aaggaaaagg gggctggaat caagttcagc caaagcactt aacacaaaa	1140
acaggtgagc ttgtgtcagt ctgttcttca aaatatgtat gatcatatgg taatgaagtt	1200
tcataatttc caactcaaaa atacaaatga tcttcagttc tatacttttg cctctattct	1260
cttataaaga aatatgtcaa cataacagta tgacataaca gttaaaaata ggacaaaagc	1320
ttgcttatct tagtttgacc tcagcataag gcaaaatccc ctggagaata catttaaaaa	1380
caaacttaaa aggaaaaaaa gcgaaaccaa cttcatgcaa agattccttt taaaactatc	1440
aaaagtcagt tcttttattc cagaggtcac tgagaaaagt accatctgct aaaattctct	1500
ttcaagcact tcttccatca tctctagag gtgagatatg ggaacagaa agcaaatcag	1560
tgttctcag gagctatatc tgttactcaa ttgagggtaa gacaaagta caatgaagat	1620
atgagtagta ttctcttcca atttttaaag attttcagaa gctgagatca aacccactc	1680
aataaaatgc aggagactag aagcaacaac ttattttgga ctctgagat caaacacatt	1740
gaactttcaa atctgggtgt ttctatcaaa atgtgatttt cattaaaac agtaagctag	1800
tctacataa aaaagcatga gctgaaagtg gaggaccctc tatcttctca ttccttaact	1860
gagccaccga tgttaagaaa aaaatggctt aagcggtagc ttcaacaact attctagtta	1920
agaaggtgac aacaaattga ggccgcgaat tcggcgaaaa ctcttctctt tggttgtgct	1980
aagaggtgat gcccaagtg caccaccttt caagaactgg atcatgaaca actttatcct	2040
cctggaagaa cagctcatca agaaatccca acaaaagaga agaacttctc cctcgaaactt	2100
taaagtccgc ttcttttgtt taaccaaagc cagcctggca tactttgaag atcgctatgg	2160
gaagaagcgc acgctgaagg ggtccattga gctctccga atcaaatgtg ttgagattgt	2220
gaaaagtgac atcagcatcc catgccacta taaataccgg ttacaggtgg tgcagacaa	2280
ctacctcta tatgtgttg ctcagatcg tgagagccgg cagcgctggg tgcgtgccct	2340
taaagaagaa acgaggaata ataacagttt ggtgcctaaa tatcatccta atttctggat	2400

ggatgggaag tggaggtgct gttctcagct ggagaagctt gcaacaggct gtgccaata	2460
tgatccaacc aagaatgctt caaagaagcc tcttctctct actctctgaag acaacaggcg	2520
accactttgg gaacctgaag aaactgtggt cattgcctta tatgactacc aaaccaatga	2580
tcctcaggaa ctgcactgc ggcgcaacga agagtactgc ctgctggaca gttctgagat	2640
tcactgtgtg agagtccagg acaggaatgg gcataagga tatgtacca gcagttatct	2700
ggtggaaaaa tctccaaata atctggaac ctatgagtgg tacaataaga gtatcagccg	2760
agacaaagct gaaaaacttc ttttggacac aggcacaaagaa ggagccttca tggtaaggga	2820
ttccaggact gcaggaacat acaccgtgct tgttttcacc aaggctgttg taagtgagaa	2880
caatccctgt ataaagcatt atcacatcaa ggaacaaat gacaatccta agcgatacta	2940
tgtggctgaa aagtatgtgt tcgattccat cctcttctc atcaactatc accaacataa	3000
tggaggaggc ctggtgactc gactccggta tccagtttgt tttgggaggc agaaaagccc	3060
agttacagca gggctgagat acgggaaatg ggtgatcgac cctcagagc tcacttttgt	3120
gcaagagatt ggcagtgggc aatttgggtt ggtgcatctg ggctactggc tcaacaagga	3180
caagggtgct atcaaaacca ttcggaagg ggctatgtca gaagaggact tcatagagga	3240
ggctgaagta atgatgaac tctctcatcc caaactggtg cagctgtatg ggggtgtgct	3300
ggagcaggcc cccatctgcc tgggtgttga gttcatggag cagcgctgcc tgtcagatta	3360
tctacgcacc cagcggggac tttttgctgc agagaccctg ctgggcatgt gtcctgatgt	3420
gtgtgagggc atggcctacc tggagaggc atgtgtcacc cacagagact tggctgccag	3480
aaattgtttg gtgggagaaa accaagtcac caagggtgct gactttggga tgacaaggtt	3540
cgttctggat gatcagtaca ccagttccac aggcacacaa ttcccggatga agtgggcatc	3600
cccagaggtt ttctctttca tgcgtatag cagcaagtcc gatgtgtggt catttgggtg	3660
gctgatgtgg gaagttttca gtgaaggcaa aatcccgtat gaaaaccgaa gcaactcaga	3720
ggtggtgaa gacatcagta ccggaattcg gttgtacaag ccccggctgg cctccacaca	3780
cgctaccag attatgaatc actgctggaa agagagacca gaagatcggc cagccttctc	3840
cagactgctg cgtcaactgg ctgaaattgc agaatacagga cttagtaga gactgagtac	3900
caggccacgg gctcagatcc tgaatggagg aaggatatgt cctattcca tagagcatta	3960
gaagctgcc ccagcccagg accctccaga ggcagcctgg cctgtactca gtccctgagt	4020
caccatggaa gcagcatcct gaccacagct ggcagtcaag ccacagctgg agggctagcc	4080
accaagctgg gagctgagcc agaacaggag tgatgtctct gcccttctc tagcctcttg	4140
tcacatgtgg tgcacaaaac tcaacctgac agctttcaga cagcattctt gcacttctta	4200

gcaacagaga gagacatgac gtaagaccca gattgctatt tttattgtta tttttcaaca 4260
 gtgaatctaa agtttatggt tccagggact ttttatttga cccaacaaca cagtatccca 4320
 ggatattggag gcaaggggaa caagagcatg agtggttttc caagaaactg gtgagttaag 4380
 taagattaga gtgagtgtgc tctgttgctg tgatgctgtc agccacagct tcctgccgta 4440
 gagaatgata gagcagctgc tcacacagga ggccggatat ctgataagca gctttatgag 4500
 gttttacaga gtatgctgct acctctctcc ttgaaggag catggcagac ccattggatg 4560
 gattgggggtg aacagttcag gtcccatgct tggagcattg ggtatctgat gtctgcacca 4620
 gaacaagaga acctctgacg gtggagaacc atgtggtgta agaagagatc ttagggtctc 4680
 tctttatacc aagctcatgt tttataccaa gctcatcttt tataccaagc tgtgcaggtg 4740
 actatgcctc ctctctgca cagaatgctt ccaccagcat cctgagaaga aatgattact 4800
 tctgtaaac atcctttttt ccagcctctg ggaatcagcc cccccctctc tgcaactatcc 4860
 gatcctcatc aacagagggc agcattgtgt tggtcagtgt tcccttggcg agcaattgaa 4920
 acttgtttag gccctagggt tgagcaattt taagggtgag actccaagtc tcttaaaatt 4980
 ctaggagaga aataaagagt ctgtttttgc tcaaaccatc aggatggaaa cagtcaggca 5040
 ctgactgggg tgcttccaag aggcattgaga gtgcctactc tggcttgagc acttctatat 5100
 gcaaggtgaa tatgtactga gctaggagac ttccctgcaa aatctctgtt caccctgggt 5160
 tcacatcccc atgaggtaat attattatc ccattttaca aataatgtaa ctgaggcttt 5220
 aaaaagccaa gacatctgcc caaagtatg gaactagaaa gtctagagct ggtattctag 5280
 cccaatctg tctgaccgca atacacagat tattttatcc tattagacac tggcttctac 5340
 tgaaaatgaa acttattgca gagggataa atacaaagat ggaaagccag taaagaagtc 5400
 agtatagaac cactagcgat agtgttgctc tggcacagac cactgtggtt gatgcatggc 5460
 cctccaactt ggaataggat ttctcttttc ctattctgta tccttacctt ggtcatgtta 5520
 atgactttgg agttattcag ttctgaccc tttaattctc acaaccaacc agtcatgttg 5580
 cttgaagcca ttagagcga gcttcaaagc aactttaaaa gattgttatg tagaagtatg 5640
 agttcttctt ttaattatca ttccaacttt cagctgtagt cttcttgaa acttatgagg 5700
 agggaggaca ttccctgata taagagagga tgggtgttga attggctctt tctaatcat 5760
 gtgacgtttt gactggcttg agattcagat gcataatttt taattattgt gaagtggaga 5820
 gcctcaagat aaaactctgt cttacgaag atgattttac tcagcttate caaaattatc 5880
 tctgtttact ttttagaatt ttgtacatta tcttttggga tccttaatta gagatgattt 5940
 ctggaacatt cagtctagaa agaaaacatt ggaattgact gatctctgtg gtttggttta 6000
 gaaaattccc ctgtgcattg tattaccttt ttcaagctca gattcateta atcctcaact 6060

gtacatgtgt acattcttca cctcctggtg ccctatcccg caaaatgggc ttcctgacctg 6120
 ggtttttctc ttctcacatt ttttaaatgg tccccctgtgt ttgtagagaa ctcccttata 6180
 cagagttttg gttctagttt tatttcgtag attttgcatg ttgtaccttt tgagactatg 6240
 ttttatatt tggatcagat gcatatttat taatgtacag tcaactgctag tgttcaaaat 6300
 aaaaatgtta caaatacctg ttatcctttg tagagcacac agagttaaaa gttgaatata 6360
 gcaatattaa agctgcattt taa 6383

<210> 2839
 <211> 1531
 <212> DNA
 <213> Homo sapiens

<400> 2839
 agtcacagag ggaacacaga gcctagtgtt aaacggacag agacgagagg ggcaagggag 60
 gacagtggat gacagggag acgagtgagg gcagagctgc tcaggacctt ggctgaggcc 120
 atcacctatg cagatctgag gtttgtaag gctccctga agaagagcat ctccagccgg 180
 ttaggacagg acccaggggc tgatgatgat ggggaaatca cctacagaaa tgttcaagt 240
 ccgcagctcc taggggtgcc ctcaagcttg gcttcttctg tactagggga caaagcagcg 300
 gtcaagtccg agcagccaac tgcgtcctgg agagccgtga cgtcaccagc tgtcggggcg 360
 atttccctcc gccgcacaac ctgcctgcga tacctctcgc tcggcctgct cctcacctgc 420
 ctgctgttag gagtgaccgc catctgcctg ggagtgcgct atctgcaggt gtctcagcag 480
 ctccagcaga cgaacagggt tctggaagtc actaacagca gcctgaggca gcagctccgc 540
 ctcaagataa cgcagctggg acagagtgca gaggatctgc aggggtccag gagagagctg 600
 gcgcagagtc aggaagcact acaggtggaa cagagggctc atcaggcggc cgaagggcag 660
 ctacaggcct gccaggcaga cagacagaag acgaaggaga ccttgcaaaag tgaggagcaa 720
 cagaggaggg ccttgagaca gaagctgagc aacatggaga acagactgaa gcccttcttc 780
 acatgcggct cagcagacac ctgctgtccg tcgggatgga taatgcata gaaaagctgc 840
 ttttacatct cacttacttc aaaaaattgg caggagagcc aaaaacaatg tgaactctg 900
 tttccaagc tggccacatt cagtgaatt tatccaat cacactctta ctactctta 960
 aattcactgt tgccaaatgg tgggtcaggg aattcatatt ggactggcct cagctctaac 1020
 aaggattgga agttgactga tgatacacia cgcactagga cttatgctca aagctcaaaa 1080
 tgtaacaagg tacataaaac ttggtcatgg tggacactgg agtcagagtc atgtagaagt 1140
 tctcttcctt acatctgtga gatgacagct ttcagggttc cagattagga cagtcctttg 1200
 cactgagttg acactcatgc caacaagaac ctgtgccctt ccttcctaac ctgaggcctg 1260

gggttcctca gaccatctcc ttcattctgg gcagtgcag ccaccggctg acccacacct 1320
 gacacttcca gccagtctgc tgcttctcc ctcttctga aactggactg ttctctggaa 1380
 aagggtgaag ccacctctag aagggaactt ggccctcccc caagaacttc ccatggtaga 1440
 atgggggtgg ggaggagggc gcacgggctg agcggatagg ggcggcccg agccagccag 1500
 gcagttttat tgaaatcttt ttaataatt g 1531

<210> 2840

<211> 4446

<212> DNA

<213> Homo sapiens

<400> 2840

tgccttgacc aggacttggg actttgcgaa aggatcgcg ggcccgaga ggtgttgag 60
 agcacaatgg ctgaacaagt ccttctctag gctttgtatt tgagcaatat gcggaagct 120
 gtgaagatac gggagagAAC tccagaagac atttttaaac ctactaatgg gatcattcat 180
 cattttaaaa ccatgcaccg atacacactg gaaatgttca gaacttgcca gttttgtctt 240
 cagtttcggg agatcatcca caaagccctc atcgacagaa acatccaggc caccctggaa 300
 agccagaaga aactcaactg gtgtcgagaa gtccggaagc ttgtggcgct gaaaacgaac 360
 ggtgacggca attgctcat gcattgccact tctcagtaca tgtggggcgt tcaggacaca 420
 gacttggtag tgaggaagcg gctgttcagc acgctcaagg aacagacac acgcaacttt 480
 aaattccgct ggcaactgga gtctctcaaa tctcaggaat ttgttgaac ggggctttgc 540
 tatgatactc ggaactggaa tgatgaatgg gacaatctta tcaaatggc ttccacagac 600
 acacccatgg ccgaagtgg acttcagtac aactcactgg aagaaatata catatttgtc 660
 ctttgaaca tcctcagaag gccaatcatt gtcatttcag acaaatgct aagaagttg 720
 gaatcagggt ccaatttcgc ccctttgaaa gtgggtgaaa ttacttgcc tctccactgg 780
 cctgcccgag aatgctacag atacccatt gttctcggt atgacagcca tcattttgta 840
 cccttggtga ccctgaagga cagtgggcct gaaatccgag ctgttccact tgttaacaga 900
 gaccggggaa gatttgaaga cttaaaagt cactttttga cagatctga aaatgagatg 960
 aaggagaagc tcttaaaaga gtacttaatg gtgatagaaa tcccgtcca aggctgggac 1020
 catggcacia tcatctcat caatgccgca aagttggatg aagtaactt accaaaagaa 1080
 atcaatctgg tagatgatta ctttgaactt gttcagcatg agtacaagaa atggcaggaa 1140
 aacacgagc aggggaggag agaggggcac gccagaatc ccatggaacc ttccgtgccc 1200
 cagctttctc tcattgagtg aaatgtgaa acgcccact gcccttctt catgtctgtg 1260
 aacaccagc ctttatgcca tgagtgtca gagaggcggc aaagaatca aaacaaactc 1320

ccaaagctga actccaagcc gggccctgag gggctccctg gcatggcgct cggggcctct 1380
 cggggagaag cctatgagcc ctggcgctgg aacctgagg agtccactgg ggggcctcat 1440
 tcggccccac cgacagacacc cagccctttt ctgttcagtg agaccactgc catgaagtgc 1500
 aggagccccg gctgcccctt cacactgaat gtgcagcaca acggattttg tgaacgttgc 1560
 cacaacgccc ggcaacttca cgccagccac gcccagacc acacaaggca ctgggatccc 1620
 ggggaagtgc aagcctgcct ccaggatgtt accaggacat ttaatgggat ctgcagtact 1680
 tgcttcaaaa ggactcacag agaggcctcc tccagcctca gcaccagcct cctcctctcc 1740
 tgtcaccagc gttccaagtc agatccctcg cggctcgtcc ggagcccctc cccgcattct 1800
 tgccacagag ctggaaacga cggccctgct ggctgcctgt ctcaagctgc acggactcct 1860
 ggggacagga cggggacgag caagtgcaga aaagccggct gcgtgtattt tgggactcca 1920
 gaaaacaagg gcttttgcac actgtgtttc atcgagtaca gagaaaacaa acattttgct 1980
 gctgcctcag ggaagtacag tcccacagcg tccaggttcc agaacaccat tccgtgcctg 2040
 gggagggaat gcggcacctc tggaagcacc atgtttgaag gatactgcc aagatgtttc 2100
 attgaagctc agaatcacag atttcatgag gccaaaagga cagaagagca actgagatcg 2160
 agccagcgca gagatgtgcc tcgaaccaca caaagcacct caaggcccaa gtgcgccggg 2220
 gcctcctgca agaacatcct ggccctgccgc agcagggagc tctgcatgga gtgtcagcat 2280
 cccaaccaga ggatggggccc tggggccac cggggtgagc ctgcccccca agaccccccc 2340
 aagcagcggt gccggggccc cgctgtgat ctttttgga atgccaaagt caacggctac 2400
 tgcaacgaat gctttcagtt caagcagatg tatggctaac cggaaacagg tgggtcacct 2460
 cctgcaagaa gtggggcctc gagctgtcag tcatcatggt gctatcctct gaacccctca 2520
 gctgccactg caacagtggg cttaagggtg tctgagcagg agaggaaaga taagctcttc 2580
 gtggtgccca cgatgctcag gtttgtaaac ccgggagtg tcccaggtag ccttagaaaag 2640
 caaagcttgt aactggcaag ggatgatgtc agattcagcc caaggttcct cctctcctac 2700
 caagcaggag gccaggaact tctttggact tggaagggtg gcggggagctg gccgaggccc 2760
 ctgcaccctg cgcacagga ctgcctcatc gtcttggtg agaaagggaa aagacacaca 2820
 agtcgcgtgg gttggagaag ccagagccat tccacctccc ctccccagc atctctcaga 2880
 gatgtgaagc cagatcctca tggcagcgag gccctctgca agaagctcaa ggaagctcag 2940
 ggaaaatgga cgtattcaga gagtgtttgt agttcatggt ttttccctac ctgcccggtt 3000
 cctttctctga ggaccgggca gaaatgcaga accatccatg gactgtgatt ctgagggtgc 3060
 tgagactgaa catgttcaca ttgacagaaa aacaagctgc tctttataat atgcaccttt 3120

taaaaaatta gaatatTTTA ctgggaagac gtgtaactct ttgggttatt actgtcttta	3180
cttctaaaga agttagcttg aactgaggag taaaagtgtg tacatatata atataccctt	3240
acattatgta tgagggtatt ttttaaatta tattgaaatg ctgccctaga agtacaatat	3300
gaaggctaaa taataataac ctgttttctg gtgtgtgttg gggcatgagc ttgtgtatac	3360
actgcttgca taaactcaac cagctgcctt tttaaggga gctctagtcc tttttgtgta	3420
attcacttta tttattttt tacaaacttc aagattattt aagtgaagat atttcttcag	3480
ctctggggaa aatgccacag tgttctctg agagaacatc ctgtcttga gtcaggctgt	3540
gggcaagtcc ctgaccacag ggagtaaatt ggcctctttg atacactttt gcttgccctc	3600
ccaggaaaga aggaattgca tccaaggtat acatacatat tcatcgatgt ttcgtgcttc	3660
tccttatgaa actccagcta tgtaataaaa aactatactc tgtgttctgt taatgcctct	3720
gagtgtccta cctccttgga gatgagatag ggaaggagca gggatgagac tggcaatggt	3780
cacagggaaa gatgtggcct tttgtgatgg ttttatttct tgtaacact gtgtcctggg	3840
ggggctggga agtccctgc atcccatggt accctgggtat tgggacagca aaagccagta	3900
accatgagta tgaggaaatc tctttctgtt gctggcttac agtttctctg tgtgctttgt	3960
ggtgtgctgc atatttgctc tagaagaaaa aaaaaaaagg aggggaaatg cattttcccc	4020
agagataaag gctgccattt tgggggtctg tacttatggc ctgaaaaatat ttgtgatcca	4080
taactctaca cagcctttac tcatactatt aggcacactt tccccttaga gccccctaag	4140
tttttccag acgaatcctt ataatttctt tccaaagata ccaaataaac ttcagtgttt	4200
tcatctaatt ctcttaagt tgatatctta atattttgtg ttgatcatta tttccattct	4260
taatgtgaaa aaaagtaatt atttatactt attataaaaa gtatttgaaa ttgacacatt	4320
taattgtccc taatagaaag ccacctattc tttgttgat ttcttcaagt ttttctaaat	4380
aatgtgaact tttcacaaga gtcaacatta aaaaaataat tatttaagaa caaaaaaaaa	4440
aaaaaa	4446

<210> 2841

<211> 1714

<212> DNA

<213> Homo sapiens

<400> 2841

ggggcatttt gtgcctgcct agctatccag acagagcagc taccctcagc tctagctgat	60
actacagaca gtacaacaga tcaagaagta tggcagtgac aactcgtttg acacggttgc	120
acgaaaagat cctgcaaaat cattttggag ggaagcggct tagcctcttc tataagggtgta	180
gtgtccatgg attccgtaat ggagttttgc ttgacagatg ttgtaatcaa gggcctactc	240

taacagtgtat ttatagtgaa gatcatatta ttggagcata tgcggaagag agttaccagg 300
 aaggaaaagta tgcttccatc atcctttttg cacttcaaga tactaaaatt tcagaatgga 360
 aactaggact atgtacacca gaaacactgt tttgttgta tttacaaaa tataactccc 420
 caactaatat ccagatagat ggaagaaata gaaaagtgtat tatggactta aagacaatgg 480
 aaaaactcttg acttgctcaa aattgtacta tctctattca ggattatgaa gtttttcgat 540
 gcgaagattc actggatgaa agaaagataa aaggggtcat tgagctcagg aagagcttac 600
 tgtctgcctt gagaacttat gaaccatatg gatccctggg tcaacaaata cgaattctgc 660
 tgctgggtcc aattggagct gggaagtcca gctttttcaa ctcaagtagg tctgttttcc 720
 aagggcattg aacgcatacg gctttggtgg gcaactaatc aactgggata tctgagaagt 780
 ataggacata ctctattaga gacgggaaag atggcaaata cctgccgttt attctgtgtg 840
 actcactggg gctgagttag aaagaaggcg gcctgtgcag ggatgacata ttctatatct 900
 tgaacggtaa cattcgtgat agataccagt ttaatcccat ggaatcaatc aaattaaatc 960
 atcatgacta cattgtattc ccacgctga aggacagaat tcattgtgtg gcatttgtat 1020
 ttgatgccag ctctattcaa tacttctctc ctcatgatg agtaagatc aaaagaattc 1080
 gaaggagatt ggtaaacgct ggtgtggtac atgtggcctt gctcactcat gtggatagca 1140
 tggatttgat tacaaaaagt gaccttatag aaatagagag atgtgagcct gtgaggteca 1200
 agctagagga agtccaaaga aaacttgat ttgctcttcc tgacatctcg gtggttagca 1260
 attattcttc tgagtgggag ctggaccctg taaaggatgt tetaattctt tctgctctga 1320
 gacgaatgct atgggctgca gatgaattct tagaggattt gccttttgag caaataggga 1380
 atctaaggga ggaaattatc aactgtgcac aaggaaaaaa atagatatgt gaaaggttca 1440
 cgtaaatctc ctccatcac agaagattaa aattcagaaa ggagaaaaca cagaccaaag 1500
 agaagtatct aagaccaaag ggtgtgttt tattaatgtc taggatgaag aaatgcatag 1560
 aacattgtag tactgtgaaa taactagaaa taacatgatt tagtcataat tgtgaaaaat 1620
 agtaataatt tttcttgat ttatgttctg tatctgtgaa aaaataaatt tcttataaaa 1680
 ctgggaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1714

<210> 2842

<211> 2665

<212> DNA

<213> Homo sapiens

<400> 2842

ggctctgggc atcaccagcg gccccaggga aaaagaaaga aatgggaaac agcatgaaat 60
 ccacccctgc gcctgccgag aggccctgc ccaaccggga gggactggat agcgaattcc 120

ttgccgtgct aagtgactac ccgtctcctg acatcagccc cccgatattc cggcgagggg	180
agaaactgcg tgtgatttct gatgaagggg gctgggtgaa agctatttct cttagcactg	240
gtcgagagag ttacatccct ggaatatgtg tggccagagt ttaccatggc tggctgtttg	300
agggcctggg cagagacaag gccgaggagc tgctgcagct gccagacaca aaggtcggct	360
ccttcgatgat cagagagagt gagaccaaga aagggtttta ctactgtcg gtgagacaca	420
ggcaggtaaa gcattaccgc attttccgtc tggcgaacaa ctggtactac atttccccga	480
ggctcacctt ccagtgcctg gaggacctgg tgaaccacta ttctgaggtg gctgatggcc	540
tgtgctgtgt gctcaccacg ccctgcctga cacaagcac ggctgcccga gcagtggagg	600
cctccagctc acctgtcacc ttgcgtcaga agactgtgga ctggaggaga gtgtccagac	660
tgaggaggga ccccgaggga acagagaacc cgcttggggg agacgagtc cttttcagct	720
atggccttcg agagagcatt gcctcttacc tgtccctgac cagtggaggac aacacctct	780
ttgatcgaaa gaagaaaagc atctccctga tgtatggtgg cagcaagaga aagagctcat	840
tcttctcatc accaccttac ttgaggact agccaagaac agacacaatg gttcatgccc	900
aaaaggaaca gaagtcca ctattgcctg ggatcttgcg aaaagcgagg ttccctgac	960
cctgggagcc tcacgtattt tagaagccaa gagaagccac atggagactc aaattcgcat	1020
cttctctatc cacatcatga ccaaaggaa cctccctgg tgtctgatca gggctgtggc	1080
atcacaaaac attggatcat gacatgtcgg gcgatgcttg gaaaagccca gcatgtatgt	1140
atgcacacat tgtgtgtgtg ggaaggacaa agccactctc acaagaaagg gcaccaggac	1200
tgctctccaa ggaactggac ctgtccagac agttacactc caaggtcatt ggagagaact	1260
tctgtatggg caagcctgag agggagagg aacaaaagct gtgtcctggc agaaggctctg	1320
ggtttcgaga tgggtgcctt gaatggaact actttaacta atccataggg acttctggta	1380
tgctttcctc tctttttaaa ggaacttcgt gacactaaac attagcccaa aggacttctt	1440
agccttcaat tgggagatac ctttggctcg ctctgcacc aaagccatat ggggtggaagt	1500
cagttggcct ccctggttct gcagagggcc agaagaatga gagagaggaa gactgctggc	1560
agggaaatcg aggaggcag actagaactg caccagcttc cctgatgtct gcagccatgg	1620
ctttgcagcg caaacagaac ttctctggga tgctgggatt ctgtcctgta tgaatgcac	1680
aagtattcat ttattgcccg aataggcatt gcattaaagt ctctgttagg tgcaggcaa	1740
gccaaaaaaa aaaaaaagat gctaagtcct aacccccaac agaagtgttc acagtgtaga	1800
cgggaaaaaa tgtataaca aatgtgtaaa aagagaaatc agctcatggc ttaggatgga	1860
attagagaca ggtgaggggc actcaggagc tcattttcca gctgctcttc agagtggaag	1920
ggctggctgg atcgggtagg taagaatagc tggatttttt agaaaagaaa tggatacagt	1980

ctaaagaatt aactcaccg gtactttatt ctaagaaggg tctggcatcc atatgaggaa 2040
 aaatgctcag ctccaggaaa gatggggagt ccaagtggat taatgatgac atgcataatt 2100
 ttaagagaca agggagaaaa cacaatgtat agccagagaa ggagaagctc ccatccaaat 2160
 cctactagga agagagtggg ctgcagatga atctgtgact catgtttccc tgtttcaaa 2220
 ggatcctggg gaaggagggg aacatgcttg cagtatctct cctgtctgt ctgtccatc 2280
 aagcattccg tccatctaag ctcatcgtgc tactgggatg tgtatgtgca gttacacagt 2340
 ttctgtatc ataaatccta gtgtgtttat acaaggagac atctgtgggt tccccaaccg 2400
 ttccaaaagg ctatttcaaa ggaaccagcc cacgtatgag aaatgaatgt aacactgtgg 2460
 acattgactt cccgcataag gcagggtgac cccctgaact ccagatgttt gcacagatc 2520
 ttatgtgttg ttttcggtg tgacgaatgt gattggaaca ttgggggagc acccagaggg 2580
 atttttcagt gggaagcatt acactttgct aaatcatgta ttatttcctg attaaacaa 2640
 acctaataaa tatttaaccc ttggc 2665

<210> 2843

<211> 1061

<212> DNA

<213> Homo sapiens

<400> 2843

ctctgttttc tcaaaactga agtcggctag gtttgcaaa ctgtgggctg agcactcagg 60
 caatcacact ctcaagaaat gcggcggtc tggaactcag cctcccaagg ctccatgcca 120
 gacaaagcat gcgtgtcaca ctgtgtacaa tagcctggat ggtttctttt gtctccaatt 180
 attcacacac agcaaatatt ttgccagata tcgaaaatga agatttcac aaagactgag 240
 ttccaatcca taacaagtgc cgatcagagg tgaaccaac agccagtgat atgctataca 300
 tgacttggga ccagcacta gcccaaatg caaaagcatg ggccagcaat tgccagtgtt 360
 cacataatac acggctgaag ccacccaca agctgcacc aaacttact tcaatgggag 420
 agaacatctg gactgggtct gtgccattt ttctgtgtc ttccgccac acaactggt 480
 atgacgaat ccaggactat gacttcaaga ctgggatatg caaaaagtc tgtggccact 540
 aactcaggt tgtttgggca gatagttaca aagttggctg cgcagttcaa ttttgcccta 600
 aagtttctg ctttgacgt ctttccaatg gaggacattt tatatgaac tacggaccag 660
 gaggaatta cccaacttg ccatataaga gaggagccac ctgcagtgc tgcccacaata 720
 atgacaagtg ttggacaat ctctgtgtta accgacagc agaccaagt aaacgttact 780
 actctgtgt atatecaggc tggcccatat atccacgtaa cagatacact tctctcttc 840
 tcattgttaa ttcagtaatt ctaatactgt ctgttataat taccattttg gtacagctca 900

```

agtacccataa tttagtctct ttggactaat acaattcagg aaagaaaaaa cccaaaaacc 960
aacctcatte acatatggct tttttttaac caataacaat taggtgtact tctattttta 1020
aacatttcag aaaaaaatat atgttatagc aatactctta c 1061

<210> 2844
<211> 2088
<212> DNA
<213> Homo sapiens

<400> 2844
gaattcgga cgagcgcgcg gcgaatctca acgctgcgcc gtctgcgggc gcttcggggc 60
caccagtttc tctgctttcc accctggcgc cccccagccc tggctcccca gctgcgctgc 120
ccggggcgct cagccctgc gggcttagcg ggttcagtgg gctcaatctg cgcagcgcca 180
cctccatggt gaccaagcct ctacaggggc ctcccgcgcc cccggggacc cccacgcgcg 240
cgccaggagg caaggatcgg gaagcgctcg aggccgagta tcgactcggc cccctcctgg 300
gtaagggggg ctttggcacc gtcttcgcag gacaccgcct cacagatcga ctccaggtgg 360
ccatcaaagt gattccccgg aatcgtgtgc tgggctggtc ccccttgta gactcagtc 420
catgcccact cgaagtgcga ctgctatgga aagtgggtgc aggtgggtgg caccctggcg 480
tgatccgcct gcttgactgg tttgagacac aggaaggctt catgctggtc ctgcagcggc 540
ctttgccgcg ccaggatctc ttgactata tcacagagaa gggcccactg ggtgaaggcc 600
caagccgctg cttctttggc caagtagtgg cagccatcca gcactgcat tccctgggag 660
ttgtccatcg tgacatcaag gatgagaaca tcctgataga cctacgccgt ggctgtgcca 720
aactcattga ttttggttct ggtgccctgc ttcatgatga accctacact gactttgatg 780
ggacaagggg gtacagcccc ccagagtgga tctctcgaca ccagtacat gcactccggg 840
ccactgtctg gtcactgggc atcctcctct atgacatggt gtgtggggac attccctttg 900
agagggacca ggagattctg gaagctgagc tcacttccc agcccatgtc tcccagact 960
gctgtgccct aatccgcggg tgcctggccc ccaaaccctc tcccagacc tcactggaag 1020
agatcctgct ggacccttg atgcaaacac cagccgagga tgttaccct caaccctcc 1080
aaaggaggcc ctgccccctt ggcttggtcc ttgctaccct aagctggcc tggctggcc 1140
tggccccc aa tggtcagaag agccatccca tggccatgtc acagggatag atggacattt 1200
gttgacttgg ttttacaggt cattaccagt cattaaagtc cagtattact aaggtgaagg 1260
attgaggatc aggggttaga agacataaac caagtttgcc cagttccctt cccaatccta 1320
caaaggagcc ttcctcccag aacctgtggt cctgattttt ggagggggaa cttcttgctt 1380
ctcattttgc taaggaagtt tattttggtg aagttgttcc cattttgagc cccgggactc 1440

```

ttatattgat gatgtgtcac cccacattgg cacctcctac taccaccaca caaacttagt	1500
tcatatgctt ttacttgggc aaggggtgctt tccttccaat accccagtag cttttatttt	1560
agtaaaggga ccccttcccc tagcctaggg tcccatattg ggctcaagctg cttacctgcc	1620
tcagcccagg attttttatt ttgggggagg taatgccctg ttgttaccce aaggtctctt	1680
tttttttttt tttttttttg ggtgagggga cctacttttg ttatcccaag tgctcttatt	1740
ctgggtgaga gaaccttaat tccataattt ggggaaggaat ggaagatgga caccaccgga	1800
caccaccaga caataggatg ggatggatgg ttttttgggg gatgggctag gggaaataag	1860
gcttgctgtt tgtttctctg gggcgtctcc tccaattttg cagatttttg caacctcttc	1920
ctgagccggg attgtccaat tactaaaatg taaataatca cgtattgttg ggagggggagt	1980
tccaagtgtg cctcctcttt ttttctctgc tggattattt aaaaagccat gtgtggaaac	2040
ccactattta ataaaagtaa tagaatcaga aaaaaaaaaa aaaaaaaa	2088

<210> 2845

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2845

atttgcttc tcttttctt tcttccgga tgagaggcta agccataata gaaagaatgg	60
agaattattg attgaccgtc tttattctgt gggctctgat tctcaatgg gaataccaag	120
ggatgggttt ccatactgga acccaaaggt aaagacactc aaggacagac atttttgcca	180
gagcatagat gaaaatggca agttccctgg ctttctcttc gctcaacttt catgtctccc	240
tctcttgggt ccagctgctc actccttgct cagctcagtt ttctgtgctt ggacctctg	300
ggcccatctc ggccatgggt ggtgaagacg ctgatctgcc ctgtcacctg ttcccgacca	360
tgagtgcaga gaccatggag ctgaagtggg taagtccag cctaaggcag gtggtgaacg	420
tgatgcaga tggaaaagaa gtggaagaca ggcagagtgc accgtatcga gggagaactt	480
cgattctgct ggaatggcat actgcaggga aggtctgctt ccgaatacac aacgtcacag	540
cctctgcagc tggaaagtc ttgtgttatt tccaagatgg tgacttctat gaaaagccc	600
tggtggagct gaaggttgca gcactgggtt ctaatcttca cgtcgaagtg aagggttatg	660
aggatggagg gatccatctg gagtgcaggt ccaccggctg gtaccccaa ccccaatac	720
agtggagcaa gcgaaggga gagaacatcc cagctgtgga agcacctgtg gttgcagatg	780
gagtggtcct atatgaagta gcagcatctg tgatcatgag aggcggctcc ggggaggggtg	840
tatcctgcat catcagaat tccctctctg gcttgaaaa gacagccagc atttccatcg	900
cagacccctt cttcaggagc gccagccct ggatgcagc cctggcaggg accctgccta	960

tcttctgctgct gcttctcgcg	ggagccagtt acttcttctg	gagacaacag aaggaataa	1020
ctgctctgtc cagtgcagata	gaaagtgcg aagagatgaa	agaaatggga tatgctgcaa	1080
cagagcggga aataagccta	agagagagcc tccaggagga	actcaagagg aaaaaatcca	1140
gtacttgact cgtggagagg	agtctctgct cgataccaat	aagtgcagct gatgctctaa	1200
tggaaaaatg gccctcttca	agcctggtga ggaaatgctt	cagatgaggg tccaccttgt	1260
taataaaatt ggatgtatgg	aaaaatagac tgcagaaaaa	gggaactcat ttatgctcacg	1320
agtggctcag tgaagattga	aaattaacct ctgagggccca	gcacagcagc tcatgcctgt	1380
aatcctagca ctttggaaag	ctgaggagggg cggatcacia	ggtcaggaga tcaagaccat	1440
cctggctaac acggtgaaac	ccggtctcta ctaaaaaatc	aaaaataaaa aaattagccg	1500
ggcatgggtga cgggcacctg	tagtcccagc tactcgggag	gctgaggcag gagaatggca	1560
tgaaccggga aggcagagct	tgcagtgcgc cgagatcacg	ccactgcact ccagcctggg	1620
agacagagcg agactctgtc	tcaagaaaaa aaaaaaaaaa	aaaaaa	1666

<210> 2846

<211> 850

<212> DNA

<213> Homo sapiens

<400> 2846

gaattccggc aaaatgcagt	acagtaacaa tgtggagaaa	gacattacac catctgaatt	60
gcctgcgaac ccaggttgct	tgcatcacia agagcattct	attaaagcta ccttaatttg	120
gcgcttattt ttcttaatac	tgtttctgac aatcatagtg	tgtggaatgg ttgctgcttt	180
aagcgcaata agagctaact	gccatcaaga gccatcagta	tgtctcaag ctgcatgccc	240
agaaagctgg attggttttc	aaagaaagtg ttctctattt	tctgatgaca ccaagaactg	300
gacatcaagt cagaggtttt	gtgactcaca agatgctgat	cttgctcagg ttgaaagctt	360
ccagggaactg aatttcctgt	tgagatataa aggcccatct	gatcactgga ttgggctgag	420
cagagaacia ggccaacct	ggaaatggat aaatggtact	gaatggacaa gacagtttcc	480
tatcctggga gcaggagagt	gtgcctattt gaatgacaaa	gggtccagta gtgccaggca	540
ctacacagag aggaagtgga	tttgttccaa atcagatata	catgtctaga tgttacagca	600
aagcccaac taatcttttag	aagcatattg gaactgataa	ctccatttta aaatgagcaa	660
agaattttatt tcttatacca	acaggtatat gaaaatatgc	tcaatatcac taataactgg	720
gaaaatacaa atcaaaatca	tagtaaaata ttacctgttt	tcatgggtgt aatattacct	780
gttctcccac tgctaattgac	ataccggaga atgagtaatt	tataataaaa agagatttaa	840
ttgaaaaaaa			850

<210> 2847
 <211> 761
 <212> DNA
 <213> Homo sapiens

<400> 2847
 atccccaccc aaagcctgat ggaccccggc tggccatgct gtcccctccc tgtggcgttt 60
 cttagcagat ggctgcagag cttcggtgat ggtcttttct gtactggagg cctcctgagg 120
 cagcgaacgt gcaaatattgc aggtgctgca tcccaagccc ctcattgctcc tgccttccctg 180
 agggccagag gggagcccca ggaccattta agccaccccc gtgttctctgc cgtcagtgcc 240
 aactgccgca tgtggaagca tctaccggt cactccagtc ccaccccacg cctgactccc 300
 ctctggaaac tgcaggccag atggttgctg ccacaacttg tgtacctca gggatggggc 360
 tcttactccc tcttgaggcc agctgctcta atatcgatgg tcctgcttgc cagagagttc 420
 ctctaccag caaaaatgag tgtctcagaa gtgtgctcct ctggcctcag ttctctctct 480
 ttggaacaac ataaaaacaaa tttaattttc tacgcctctg gggatatctg ctcagccaat 540
 ggaaaatctg ggttcaacca gccctgccca ttcttaaga ctttctgctc cactcacagg 600
 atcctgagct gcacttacct gtgagagtct tcaaaacttt aaaccttgcc agtcaggact 660
 tttgctattg caaatagaaa acccaactca acctgcttaa gcagaaaata aattttattga 720
 ttcaagtttg gagaaaaaaa aaaaaaaaaa aaaaaaaaaa a 761

<210> 2848
 <211> 5426
 <212> DNA
 <213> Homo sapiens

<400> 2848
 ggggagggaag aaaggcgaag gcaaggcgaa ggggtggaga gtgatataa gagcgagaga 60
 aaagagagga cagcggacga gcagatccgg tatctggaat ccggcgccct agaactgttt 120
 tttcgggaga gcaaaaggct tgtctacggc aggtcgggga tatagcctct ccttccgatg 180
 aaaagagaaa ggaagaatgg actacagcca ccaaacgtcc ctagtcccat tgggacaaga 240
 taaatacatt tccaaaatg aacttctctt gcattctgaag acctacaact tgtactatga 300
 agggccaagt ttacagctcc ggcaccggga ggaagaagac gaggttcattg tggaggggct 360
 cctgaacatc tcttggggcc tgcgcgggcc cattcgctg cagatgcagg atgacaacga 420
 acgcattcga cccctccat cctcctctc ctggcactct ggcgtgaacc tggggggctca 480
 gggaaacct ctgaagcccc tgactgtgcc caaagttcag atctcagagg tggatgcccc 540
 gccggagggt gaccagatgc caagctccac agactccagg ggcctgaagc ccctgcagga 600

ggacacccca cagctgatgc gcacacgcag tgatgttggg gtgcgtcgcc gtggcaatgt 660
 gaggagcct agtgaccagc ggcaatcag acgccaccgc ttctccatca acggccattt 720
 ctacaacat aagacatccg tgttcacacc agcctatggc tctgtacca acgtccgcac 780
 caacagcacc atgaccaccc cacaggctct gaagctgctg ctcaacaat ttaagattga 840
 gaattcagca gaggagtgtt ccttgtacgt ggtccatacg agtggtgaga aacagaagct 900
 gaagggcacc gattaccgcc tgattgcccg aatcctccag ggcccatgtg agcagatctc 960
 caaagtgttc ctaatggaga aggaccagggt ggaggaagtc acctacgacg tggcccgata 1020
 tataaagttc gagatgccgg tacttaaaag cttcattcag aagctccagg aggaagaaga 1080
 tcgggaagta aagaagctga tgcgcaagta caccgtgctc cggctaataa ttgcacagag 1140
 gctggaggag atagccgaga ccccgacaac aatctgagcc atgagaacga ggggatctgg 1200
 gcaccccgag aaccgccatt gcccataaga ccccagga gctaggcact ttctttccat 1260
 ggaacattt agacacaac ctcccagct ccggccaagc catcatttgc tacctggagc 1320
 tggatgtaga agtcagcaga cagctcccta tccttgacc cctgcccctc ttttttctgc 1380
 tcacaaggac ttttgatttt agttataagg aggacccaaa atgtgtgtgt gtacatgtgt 1440
 gtgcacacat ggtacgtgtc catgtgccta cctgatactt tcacatgtaa ttaaatcca 1500
 ggcaaccagc acaagagccg tgagcttggc acatgtgctg ctctgagca gaaaaatcag 1560
 aggagccact gatctgagtg gtatttaggt tgaaggaaag atttctctc tcaagtcca 1620
 gggagcagcc acacgtctgt ctgtgtttag agagggaaga gggttctcca ggttcacat 1680
 ttgggtgttt tatatgttgg tagaaattct cctgtatgc ctagaaggat cagtgaatgt 1740
 aagagccttg gaaattaaca aaataacagc cacataacct tgcggcaagt ctgatggaaa 1800
 gaaaaagata aaccatccgt ggggtagatg caataagccc acgtattttt acactggaaa 1860
 cgttgattgt tttaaatgac aaagacatat gtgatgttct atgtggaac ctgtgaagag 1920
 tggattctgc ctccatctct gctccatagg ctacccttag gagacagaga agatctgtg 1980
 tgtttctctg taccagctg acagcctgtc tctatggcg ttccttgagt ggaaggaaat 2040
 gtctcaagaa acaagatct cgctgggtgcg tacacagtc tgaccagcta gtgtggccag 2100
 ggctcgttg cctggtggcc aggaagtctc aggttgaagg gaaatgtcga ggctacctgc 2160
 agatatgaca ggtgccttga acgcagccca tcttcatgtc atcaaggtc ttctgcact 2220
 tgaagctggg gcgatgtttg cagtcaagac cattctttcc aacctctggg ttcttgcaag 2280
 ttgcctcac cttgtgtgtg gagatgcatt ccaagaatga agcctcatct tgctactgag 2340
 tgtgggttcc agggaagctc tttaggccac ctgggtgaagg tgcaggggga ggaaggagct 2400
 tctctcagc tcctctgagc agccacctat gtgatcttta aatccaacc caatgggaga 2460

aaagggcaag aacagtctgt gccctgggac tcctatcagg aagcttgaca ggcagctggg	2520
catcagtgca gctgatatcg ttgaggagg gagacagatg ctggacctg ggtgcctggc	2580
tatggagatt gaccaagcaa gatcaggagc tcctgatagc aggcgtcttt gagcctagct	2640
ggggtagagg cactgcccac ctctctcca cctctctcc acagaatggt tgcagagctg	2700
ggcagttgag gaaaggacag cccctggttg gtgcctccaa aggaaggtag acttttttg	2760
tggagagctt tctgcctgg gcaccctcct gccccgatt catacctatg gcttcttgag	2820
aaggctcaca gctgtggtct taacgtagac tgcagaaaga tggcatcgg cccctggcat	2880
ttcgccaagg gttttatagc aagtctcct cctccatagg gacagcagca ccagccctgt	2940
ggggcatgga gtggaagccc agaagggtt ctgcaagctg cacagaactg gggtaagaag	3000
acaaagagta gccaccggga gaggtctcct ttgttacagc tgggaaagaa cagtctgtg	3060
aatgcaaaca cctcctgagt ttgcaattg agaaaatgat ttggagaact tctctctg	3120
taatttttat ttgaaatgt cagggcctta gttggccca gtaattctcc ttggaggact	3180
tgggagaaga atttccaca agcaaaactac taaccactag ctcttactgg acagcgattt	3240
ctggettata agagtctct ttgatttgca ctagcactac gatagtgtta gatggggaaa	3300
tactgcaaca tgtccagttg gccagatcac tttccaagg agcgatacta aggcagactc	3360
agctttttaa agatgggagg tcaggagggt gaagtggag gagatcccat ctcacacaac	3420
acacttccac gtaatgcaga ccacactttt ccatcttctg ctgccctctt gagaggctcat	3480
ttctcacgtc ctaagaacct gatcagaaat ttggaagggt ttctttgaaa tagcagcagt	3540
tgaacacagag acactttgcc acagtgtgga gcagattttc tctactggtat cacatggctt	3600
tgcagttttg aactcttcca ccgatttttg ggagtttatg taattgcgtg caatgaacct	3660
gaaatgtgt aaaggacaaa agaccagttt atagggttgg gtttttttcc caacttgtga	3720
aaagcagttt agctgcattc gtctccccac cccccccacc ccggggaggg cttatgttac	3780
aagggtgatca agtgaaggaa aaacctgagc ctatctggct gggatggtgg aattaagcac	3840
aaggctcatc tctctgtgat cacatgagag ggaagggtgat gacttaaatg gcaggggggtg	3900
gggattatct tggggagagg ctgaaaagca caaaagatag tcttccctgt acgtattggt	3960
gaagaacgtg cacaaggctg gatggacttc aacttgaggt tgagttgagg caagaggatt	4020
tctgatatt agtcacccat ctgcaagaaa aatgctgagg cctcgggtca agattttgat	4080
ctgagacatg ctgatgcttc aaggagaaat attttcaca tctctcttc cctcaccaga	4140
agagaacagt actctctctc agaaacctct aggtaaacac attttatcct aatatcggta	4200
gcataataat ccccccccaa aatatctgtt ttccatgcaa aaaagtctca acaagaagtc	4260

tgtggagttg agtggttact tcaaagtgtc aggagagtga agaaattggc cacagaagag 4320
 caagaagctc tcttaagaaa agggaattct ctttaagaa accaccacca acaacaaaac 4380
 aacaaaaaac catgttttat gtcaaaagctc ttagcacag agaattgtgt gtcacagata 4440
 catgcccag agaggtttct tctttcttt ttttttttt tgagacagag tctggttctg 4500
 tttcccaggc tggagtgcag tgggtggatc tcagctcact gcaacatccg cctctgggg 4560
 tcaagtgtt ctcctgtctc agcctcccaa gtatgtggaa ttacagggac cgcaccac 4620
 gcccggttaa tttttttgtg tgggtttagt agaggtggg tttcaccatc ttggccaggc 4680
 tggctctgaa ctcctgacct cgtgatccac cgcctaggc ctcccaaagt gttgggatta 4740
 caggcgtgag cactgtgcc cagccaaaag agaaattct acatgaacaa ggcaatttca 4800
 gtgtcttaca gcggccaaac catgacgtga agaagtgatc aggagacagg agatcaccat 4860
 aagcgtccct gatatagcag cacacatttt cagttttcca cttaaatcgt tttgcacaaa 4920
 gtcttgcttc gctcagatga gatgagatat gatttcctag agatgtaaaa ataagaatga 4980
 atgtggcgcc ccttctctcc agatgtaata gaaagctctg ccctatcaca aggggggtgt 5040
 tgaagcgccc ctgtgtttt aactgtattt aactgagcac aagatgcaca agctgtgtgt 5100
 ggaaaccctc agtttacett tggagtcttc cctgcagatc gcagacctgt ttccaggctg 5160
 atgtttctg tgtgtaattg ctacgcttcc tgaagggtt tcccaattgt tttagccttg 5220
 tgaagtattc ttaattataa ctgccttcc agcgatggta catgacttga ttcaacgttt 5280
 ggttctgaac ttacacactg atgcgtttac tcactaaca taatctgaca gggcctcagc 5340
 aaggagacca tacatttttg taacattttg atatgtttta atgcacttga cttagatctt 5400
 actgaaataa agcacttttc aaagag 5426

<210> 2849

<211> 2206

<212> DNA

<213> Homo sapiens

<400> 2849

cgcggggcca ggcggcggc cccaggagg tggcaggat ggcagagggc aaggcaggcg 60
 gcgcggccgg cctcttcgcc aagcagggtc agaagaagtt tagcagggcc caggagaagg 120
 tgctgcagaa attggggaaa gctgtagaaa ccaagatga acgatttgaa caaagcgcta 180
 acaacttcta ccaacaacag gcagaaggcc acaagctgta caaggacctg aagaacttcc 240
 ttagtgacgt caaagtgatg catgaaagtt caaaaagagt gtcagaaacc ctgcaggaga 300
 tctacagcag cgagtggggt ggtcatgagg agctgaaggc catcgatgg aataatgatc 360
 tcctttggga agactacgag gagaaactgg ctgaccaggc tgtaaggacc atggaaatct 420

atgttgccca gttcagtgaa attaaggaga gaattgccaa gcggggtcgg aaactcgtgg	480
actatgacag tgcccgcacac cacctggagg cagtgacagaa tgccaagaag aaagatgagg	540
ccaagactgc caaggcagag gaagagttca acaaagccca gactgtgttt gaagatctga	600
accaagaact actagaggag ctgcctattc ttataatatg tcgtattggc tgctatgtga	660
ccatcttcca aaacatttcc aacttgaggg atgtcttcta cagggaaatg agcaagctga	720
accacaatct ctacgaggtg atgagcaaac tggagaagca acattccaat aaagtctttg	780
tggtgaaggg actgtcaagc agcagcaggc gctctttagt catttctccc ccagttcgaa	840
cagctacagt ctccagtcct cttacctcac ctactagtcc ctctacactt tccttgaaga	900
gtgagagtga atctgtctca gcaactgaag atctggcacc tgatgcagcc caaggggaag	960
acaattctga gatcaaggag ctcttagaag aggaggaat agagaagga ggatctgaag	1020
caagctctc tgagggaagat gagcctctac cagcctgcaa tggccccgcc cagggccagc	1080
cctctcctac cactgaaagg gccaaagtcgc aggaggaagt tctccccagc tccacaactc	1140
catcaccagg cggagccctg agcccttcag ggcagccttc atcatctgcc acagaagtag	1200
tcctccgaac ccgcaccgca agtgaaggat ctgaacaacc aaagaagaga gcctctatcc	1260
agaggacctc agcaccctcc agtaggcctc ctccaccagc agccactgca agccccaggc	1320
cctctcaggg gaacatacct tccagcccta cagcctctgg aggggggttca cccaccagcc	1380
ctagggcctc cttggggact gggactgcaa gtcctaggac ctccctagag gtctctccta	1440
atccagaacc accagagaag ccagtaagaa ctcttgaggg caaagaaaat gaaaacatcc	1500
acaatcagaa cctgaagaa ctttgtactt cccccacctt aatgacatct caggttgctt	1560
cagagcctgg agaggcaaaag aagatggaag acaaggaaaa ggataataag cttatctcag	1620
ctgactcctc ggagggccaa gaccagcttc aagtctccat ggtaccagaa aacaacaacc	1680
tcacagcacc tgaacctcaa gaagagggtat ccacaagtga aaatccacaa ctctgaagag	1740
aaactaccaa gactcctcct gccccaaacc tcgccagaga agctcttcaa ccagagggta	1800
taggtcagag ggatataaga gccagcatcc atccctgggt tctcagtagg aatgctggtg	1860
ctgtctaaa acctggcatt aatggaggcg gaggagcagc cttacgggag ggatggaggg	1920
aggcaggctg gggagaagag aacattagac tcagggaata ttaattctg gttttagcat	1980
tattagaata agactttata cattaactaa agtggagctt taatcactat aaaaagcaaa	2040
agtatctata gacacagaca cttgcctata cagagacata accacacaca ctacagaggat	2100
agtgaacaaa tctgtctttg acttacgacc cattttgcaa gacttaaagc cggagaacaa	2160
cattttcaga ttgttaaata aagtctgatt ctgactaaaa aaaaaa	2206

<210> 2850
 <211> 1712
 <212> DNA
 <213> Homo sapiens

 <400> 2850
 cagtttagcct caaacaaaa cgaaggttag accaaggga cgtattagat atggaagtaa 60
 agaaaaagaa acatgataaa caagaacaga aaggaagtg gggagctaca ttcaaatagg 120
 gtgactcttt gtcaaaccca aacgaagag ccattgttaa agaaaagatg gtatcaata 180
 ctaagtctgt agacacgaaa gcgagttcat ctaaatttag tagaattcta actcctaagg 240
 agtatttaca aaggcagaag cataaagaag ctccgagtaa taaagcatcg aagaaaatct 300
 gtgtgaaaaa cgtgccatgt gattctgaac atatgagacc aagtaaacct gccgtgcagg 360
 ttgaaagttg tgggaaatca aatgagaac acagcagcg cgtgcagacc tctaagaat 420
 cattaaatgg cttgacaagc catggtaaaa acctcaaat ccaccattct caggagtcta 480
 aaacatacaa cattctaagg aatgttaag aaaaagttgg tgggaagcag cctgataaaa 540
 tatggattga taagactaaa ttagacaaat taaccaatat aagcaacgaa gctcaattca 600
 gccaaatgcc tcccaagta aaggatcaaa agaaattata tctgaataga gttgggttta 660
 aatgcactga acgtgaaagc atttctctca ccaattaga aagttcacc aggaagcttc 720
 ataaagataa gagacaggaa aataaacata agaccttttt accggtgaaa ggtaacacag 780
 aaaaatcaaa catgctggag tttaaattat gtccagatat ctactaaag aatacaaaact 840
 ctgtggaaga acggaaggat gtaaacctc atcctaggaa ggagcaagcc cctctgcaag 900
 tttcaggaat aaaaagtaca aaagaagact ggtaaaatt tgttgctaca aagaaaagga 960
 cacagaaaga cagccaagag agagataatg ttaattcaag actctcgaag agaagcttca 1020
 gtgcagatgg atttgagatg ctacaaaacc cagtaaaaga ttcaaaagaa atgtttcaaa 1080
 cctacaacaa gatgtacctg gagaagagaa gcagaagcct tggtagcagt cctgtaaaat 1140
 aattacaaga tgtggttttg taattgccac tgggaaattt ttttctttt ctgttcaaaa 1200
 tatttcgctg aaactaatga gaaatgcat gataagatt tctcagatt tggttccac 1260
 tttcattgta tttcattgaa agtgcttaat taaaatggct tgagaacttt gggtagccat 1320
 gtgtaagaaa tggatggatg tcaccgggga aacaaggatg ttgaatttct actttattga 1380
 accgatttta ccattatttt aaaaggaatg cttatacaaa tcaatttgaa attctaccca 1440
 tcttgagggg ggaccgttcc tcagttaagg acttgtttat ttaaatggga ctgtaaatat 1500
 gttttggtt ctaagctata ttagcaaaat ttatttttca aaaacgcccc ctgtgatgtg 1560
 aatgtcaaaa tatattctta agtgttttat aactaattgt aaactttttt tcagaagtct 1620
 tattttatc ttgtgaaact gaacacaatt ttgggacaac gtttaaacat tacttttcat 1680

acttgaaata aacatttatt ttttaaaaaa ct 1712

<210> 2851
 <211> 1726
 <212> DNA
 <213> Homo sapiens

<400> 2851
 tttttccagt gaaacaaaac gtaagaatct gagtttgttt ttcaaagatc actaaatttt 60
 agttatgatt atatcacatt ttccaaaatg tgtggcagtt ttgcccctcc ttgctctgag 120
 tgttggtgca ctggacactt ttattgctgc agtatatgag catgcggtga tattacccaaa 180
 cagaacagaa acacctgttt caaaagaaga agctttgtctc ctgatgaaca agaacataga 240
 tgttttggag aaagcagtta agctggcagc gaagcagggt gcacatatca ttgtgacccc 300
 agaagatgga atctatggtt ggatcttccac caggagagagc atttaccctc atctagagga 360
 tataccagac cctggagtga actggattcc atgtagagac ccctggagat tcggcaacac 420
 accagtgc aaagactca gctgcctggc caaggacaac tctatctatg tcgtggctaa 480
 tattggggac aagaagccat gcaatgctag tgactctcag tgtccccctg atggccgtta 540
 ccaatacaac actgatgtgg tgtttgattc tcagggaataa ctgttggcac gctaccataa 600
 gtacaatctt ttgacactg aaattcagtt tgatttcccc aaggattcag aacttgtgac 660
 ttttgacact ccctttggga agtttggcat ttttacttgc ttgacattt tttctcatga 720
 cccagctgcg gtggtggtgg atgaagtctc aattgacagc attctctacc ccacagcatg 780
 gtacaacacg ctgccctcc tctcggtgtg tcccttccat tcagcatggg ccaaggccat 840
 gggagtcaat ctacttgctg caaataccca caacaccagc atgcacatga caggagtggt 900
 aatctacgcc ccagaagcag tcaagtgta ccactatgac atggaaacag agagtgtgca 960
 gctgttgcta tcagaactga agtctcgcc cgcctgtgag cccacctacc ctgcagctgt 1020
 tgactggcat gcgtatgcca gcagtgtcaa gccattttcc tctgaacagt cagattttct 1080
 ggggatgatt tattttgatg agtttacctt caccagctt aagagaaata caggaaatta 1140
 cacagcttgc cagaagatc tgtgttgta cttaacttac aagatgtctg agaagcgaac 1200
 agacgagatc tatgccctag gtgcttttga tggactgcac acagtagaag gccaatatta 1260
 cttacagata tgtgcattac tgaagtgtca aaccactgac ctggaaacgt gtggagaacc 1320
 tgtgggtgca gcttttacca agtttgaaga cttctccctc agtggcacat ttggaacgcg 1380
 ttatgttttc ccacagatca ttctaagtgg gagtcaagct gccctgaaa gacattatga 1440
 gatttcaaga gatggacgct tgaggagccg aagtggagcc cctttgctg tcttagttat 1500
 ggcctgtat ggaagagtgt ttgagaagga cctccacgc ttagggcagg gatctgggaa 1560

attccagtga tctccttttag cagagccctt ttaggattag cctggctaag aaaggaagaa	1620
aaaaaagaga tccgttagtg tctgtttaga aaagatgtta taaacttaca gaaacaata	1680
taataaactg aagcagattt gaaaagcaaa aaaaaaaaa aaaaaa	1726
<210> 2852	
<211> 7603	
<212> DNA	
<213> Homo sapiens	
<400> 2852	
ttttcttgc tttcttcct tttttttctt tttgcaaaca aaacaaaaa cagcatagaa	60
gaaagagcaa aataaagaag aagaagagga ggaagagagg gaaagagagg aagggaaaaa	120
aaacaccaac ccgggcagag gaggaggtgc ggcggcggcg gcggcgccgg cagcgccggc	180
agcggcgccg cgggcggtcg gacccctcc cccggctccc cccatcagtg cagctctccg	240
ggcgatgcca gaatagatgc cggggcaatg tcccgcgcga aacagggcaa cccgcagcac	300
ttgtcccaga gggagctcat caccacagag gctgacctg tggaggccgc cactctcgaa	360
gaagacgagg gtctggagat agaggagcca agtggcctgg ggctgatggt ggggtggccc	420
gacctgacc tgctcacctg tggccagtg caaatgaact tcccctggg ggacatctg	480
gtttttatag agcacaaaag gaagcagtg ggcggcagct tgggtgcctg ctatgacaag	540
gccttgaca aggacagccc gccacctcc tcacgctccg agctcaggaa agtgcctgag	600
ccggtggaga tcgggatcca agtcaccccc gacgaagatg accacctgct ctcacccacg	660
aaaggcatct gtcccaagca ggagaacatt gcaggtaaa atgagccttc cagctacatt	720
tgcaacaat gcaagcagcc cttcaacagc gcgtggttcc tgctgcagca cgcgcagaac	780
acgcacggct tccgcatcta cctggagccc gggccggcca gcagctcgt cagcgcggcg	840
ctcaccatcc cgcgcgcgt cgggccggag gccgtggcgc agtccccgt catgaatttc	900
ctgggcgaca gcaacccctt caacctgctg cgcgatgacg gccccatct cggggaccac	960
ccgggcttcg gcgaggccgc cctgccgggc acgcgcctc tcttcagtc cccgcgcgcg	1020
caccacctgg acccgaccc cctcagtgcc gaggagatgg ggctcgtgc ccagaccccc	1080
agtgccttcg accgagtcac gcgcctgaac cccatggcca tcgactcgc ccgcatggac	1140
ttctcgcgcg ggctccgcga gctggcgggc aacagctcca cgcgcgcgc cgtgtccccg	1200
ggcgcgcgca accctatgca ccggtcctg aaccccttc agccagccc caagtccccg	1260
ttcctgagca cgcgcgcgt gcgcgccatg cccctggcg gcacgcgcgc cccgcagccg	1320
ccagccaaga gcaagtctg cgagttctgc ggcaagacct tcaagttcca gagcaatctc	1380
atcgtgcacc ggcgcagtc cacgggcgag aagccctaca agtgccagct gtgcgaccac	1440

gcgtgctcgc aggccagcaa gctcaagcgc cacatgaaga cgcacatgca caaggccggc 1500
 tcgctggcgc gccgctccga cgacgggctc tcggccgccca gctccccga gcccgccacc 1560
 agcgagctgg cggggcaggg cctcaaggcg gccgacggtg acttccgccca ccacgagagc 1620
 gaccctgctc tgggccacga gccggaggag gaggacgagg aggaggagga ggaggaggag 1680
 gagctgctac tggagaacga gagccggccc gagtcgagct tcagcatgga ctcggagctg 1740
 agccgcaacc gcgagaacgc cggtggtggg gtgccccggg tccccggcgc ggggggcggc 1800
 gcggccaagg cgctggctga cgagaaggcg ctggtgctgg gcaaggctcat ggagaacgtg 1860
 ggcttagcgc cactgccgca gtacggcgag ctctggcgca acaagcagaa gcgcggcgcc 1920
 ttctgaagc gtgcggcggg cggcggggac gcgggcgacg acgacgacgc gggcggtgctg 1980
 ggggacgcgc gcgcggggcg cgcggtcaac gggcgcgggg gcggcttcgc gccaggcacc 2040
 gagcccttc cggggtcttt ccgcgcgaag ccgcgcgcgc tgcagagccc cggggtcaac 2100
 agcgccgccca agcgcatcaa ggtggagaag gacctggagc tgccgcccgc cgcgctcacc 2160
 ccgtccgaga acgtgtactc gcagtggctg gtgggctacg cgcgctcgcg gcaacttcacg 2220
 aaggaccctt tcttgggttt caccggacgca cgacagtcgc ctttcgccac gtcttcggag 2280
 cactcgtccg agaacggcag cctgcgcttc tccacgcgc cgggggacct gctggaaggc 2340
 ggctctctcg gccgcagcgc caccggccagc ggaggcagca cccgcacct gggcggcccc 2400
 ggccccgggc ggcccagctc caaggagggc cgcgcgacgc acagtgcgca gtaactgcggc 2460
 aagggtttca agaactgcag caacttgacg gtgcaccggc ggagccacac cggcgagcgg 2520
 ccttacaagt gcgagctgtg caactacgcg tcgcgcgaga gcagcaagct caccgcgccac 2580
 atgaagacgc acgggcagat cggcaaggag gtgtaccgct gcgacatctg ccagatgccc 2640
 ttcagctgtc acagcacctt ggagaaacac atgaaaaagt ggcacggcga gcaacttgctg 2700
 actaacgacg tcaaaatcga gcaggccgag aggagctaag cgcgcgggcc ccgcgcgcc 2760
 gcacctgtac agtggaacgc ttgcccaacc agagaatgct gacctgactt gcctccgtgt 2820
 caccgccacc ccgcaccccc cgtgtccccg gggccccagg gaggcgccac tccaacctaa 2880
 cctgtgtctg cgaagtctta tggaaacccg aggggttgatt aaggcagtac aaattgtgga 2940
 gccttttaac tgtgcaataa tttctgtatt tattgggttt tgtaattttt ttggcatgtg 3000
 caggtacttt ttattattat tttttctgtt tgaattcctt taagagattt tgttgggtat 3060
 ccatcccttc tttgtttttt ttttaacccg gtagtagcct gagcaatgac tcgcaagcaa 3120
 tgttagaggg gaagcatatc ttttaaatga taatttgggg ggaggggtgg tgctgctttt 3180
 ttgaaattta agctaagcat gtgtaatttc ttgtgaagaa gccaacactc aaatgacttt 3240

taaagtgtgt	tactttttca	ttccttcctt	ttttttgtcc	tgaataaaaa	agtgccatgc	3300
agtttttttt	ttaattattt	tttaattttt	tttttggttt	ttgttttttg	ggtggggggt	3360
gtggatgtac	agcggataac	aatctttcaa	gtcgtagcac	tttgtttcag	aactggaatg	3420
gagatgtagc	actcatgtcg	tcccagagca	agcggccttt	tctgtgttga	tttcggcctt	3480
catattacat	aagggaaacc	ttgagtgggtg	gtgctggggg	aggcacccca	cagactcagc	3540
gccgccagag	ataggggttt	tggagggctc	ctctgggaaa	tggcccgaca	gcattctgag	3600
gttgtgcatg	accagcagat	actatctgtg	tgggtgtccc	tgggtgtcca	tggtgtctat	3660
tcgctgtaga	ttaggtctaca	taaaatgggc	tgaggggtacc	tttttgggga	gatgggggtg	3720
cctgcagtga	cacagaaagg	aagaaactag	cggtgttctt	ttaggcgttt	tctggcctga	3780
cggcttctct	ctttttttaa	atcaccccca	ccacataaat	ctcaaactct	atgttgctac	3840
aaggggtcat	ccatcatctt	ccaagcagac	gaatgcccta	attaattgaa	gttagtgctt	3900
tctcatttaa	tgcacactga	tgatattgta	gggatgggtg	gggtggggat	cttgcaaat	3960
tctattctct	tttactgaaa	aagcagggga	tgagttccat	cagaagggtc	ccagcgctac	4020
ttcccagggt	tttatttttt	ttttcctatc	tcattaggtt	ggaagggtact	aaatattgaa	4080
ctgttaagat	tagacatttg	aattctgttg	acccgcactt	taaagccttt	gtttgcattt	4140
aaattaaatg	gcttctaatac	aagaaattgc	agcatattct	tctctttggc	ccagagggtg	4200
gttaaactgt	aagggacagc	tgagattgag	tgctcagtatt	gctaagcgtg	gcattcacaa	4260
tactggcact	ataaagaaca	aaataaaaata	ataatttata	ggacagtttt	tctactgcca	4320
ttcaatttga	tgtgagtgcc	ttgaaaactg	atcttcctat	ttgagtctct	tgagacaaat	4380
gcaaaacttt	ttttttgaaa	tgaaaagact	tttttaaaaa	gtaaaacaag	aaaagtacat	4440
tctttagaaa	ctaacaaga	cacatttact	ttaagtaaaa	aaaaaaaaaa	tcttggttga	4500
agatagagga	tatgaaatgc	cataagagcc	aatcaaatga	agaaataaac	ccagcacaac	4560
cttggaatc	cattagctga	attatcctca	gccccctttg	tttttgggac	aacgtgctt	4620
agatagggag	tggaggtgat	ttactgctga	attaaaaact	aagtgcaca	agttacaagt	4680
tgatctggt	gaatgaaaag	caaaacaaaa	acaattcagg	aacaacggct	aattttttct	4740
aaagttaaat	ttagtgcact	ctgtcttaaa	aatacgttta	cagtattggg	tacatacaag	4800
ggtaaaaaaa	aaattgtgtg	tatgtgtgtt	ggagcgatct	ttttttttca	aagtttgctt	4860
aatagggtat	acaaaaatgc	cacagtggcc	gcgtgtatat	tgttttcttt	tgggtgacggg	4920
gttttagtat	atattatata	tattaaaatt	tcttgattac	tgtaaaagtg	gaccagtatt	4980
tgtaataatc	gagaatgcct	gggcatttta	caaaacaaga	aaaaaaatac	ccttttcttt	5040
tccttgaaaa	tgttgacgta	aaattttaat	ggtgggtcta	taaatttggt	cttggttacg	5100

taactgtaaa gtcggagttt tagtaaat ttttctgcct tgggtgttga atttttat 5160
caaaaaaat gtatagaaac ttgtatttgg ggattcaaa gggattgcta caccatgtag 5220
aaaaagtatg tagaaaaaaa gtgcttaata ttgtatttgc ttgcagaaa aaaaaaaat 5280
cacatttctg acctgtactt attttctct tccgcctccc ctctggaatg gatatttgg 5340
ttggttcata tgatgtaggc acttgcgtga tttttactgg agctcgtaat tttttaatg 5400
taagcttgtc cttttaaagg gatttaatgt acctttttgt tagtgaattt ggaataaaa 5460
agaaaaaaa aacaaaaaca acacggctgc cataatat ttttttaatt tggcaggata 5520
aatatttgc aaaaaaac atttgtatgt taagtccat tgtacaggag aaaagggtt 5580
gtttgacaac ctttgagaaa aagaacaaa aggaagtagt taaatgcttt ggttcacaaa 5640
tcatttagtt gtatatattt ttgtgcgaa ttggcctaca cagagaaccg ttcgtgttgg 5700
gcttctctct gaacgccccg aacctgcat caaggctcct tgggtggcc acagcagacc 5760
agatgggaaa ttatttgtgt tgagtggaaa aaatcagtt ttgtaaaga tgtcagtaac 5820
attccacatc gtcctccctt tctctaaag gccatctcta agatgtcaga ttagaggag 5880
agagagcgag agaacatctt ctttctctac catcactcct gtggcggtca ccaccaccac 5940
ctctccgcc cttaccagca gaaagcaatg caaactgagc tgctttagtc cttgagaaat 6000
tgtgaaacaa acacaaatat cataaaagga gctggtgatt cagctgggtc cagggtgaagt 6060
gacctgctgt tgagaccggt acaaattggg ttccaggaag gagactccat cacagccagg 6120
accttctgtg ccatggagag tgttgccctc ttgtctttct tccctgcttt gctgctttgc 6180
tctctgaaac ctacattccg tcagtttccg aatgcgaggg cctgggatga atttggtgcc 6240
tttccatate tegtctctc tcttccctc gcgttctctc tccatctctc atctccatt 6300
ggctcttttt ttttctttca ttttttattt aatttctttt ctctctgtct gttctctccc 6360
taatcctcta ttttattttt attttttga aagccaagta gctttaagat aaagtgggtg 6420
tcttttggat gagggaataa tgcattttta aataaaatc caatatcagg aagccatttt 6480
ttatttcagg aaatgtaaga aaccattatt tcaggttatg aaagtataac caagcatcct 6540
tttgggcaat tccttaccaa atgcagaagc ttttctgttc gatgcactct ttcctccttg 6600
ccacttacct ttgcaaagt aaaaaaagg ggggaggaa tgggagagaa agctgagatt 6660
tcagtttctc actgcagttt cctacctgca gatccagggt ctgctgttgc ctttgatgc 6720
cccactgagg tcctagagt cctccagggt ggtcttctct tagtcataac agctagccag 6780
tgctcaccag cttaccagat tgccaggact aagccatccc aaagcacaag cattgtgtgt 6840
ctctgtgact gcagagaaga gagaattttg cttctgtttt gtgttataaa aaccaacacg 6900

gaagcagatg atcccagag agaggcctct agcatgggtg acccagccga cctcaggccg	6960
gtttccgcac tgccacaact ttgttcaaag ttgccccaa ttggaacctg ccacttgga	7020
ttagagggtc tttcatgggg agagaaggag actgaattac tctaagcaaa atgtgaaaag	7080
taaggaaatc agcctttcat ccggtccta agtaaccgtc agccgaaggt ctcgtggaac	7140
acaggcaaac ccgtgatttt ggtgctcctt gtaactcagc cctgcaaaagc aaagtcccat	7200
tgatttaagt tgtttgcat tgtactggca aggcaaaata tttttattac cttttctatt	7260
acttattgta tgagcttttg ttgtttactt ggagggtttg tcttttacta caagtttggga	7320
actatttatt attgcttggg atttgtgctc tgtttaagaa acaggcactt ttttttatta	7380
tggtataaat gttgagatga caggagggtca tttcaatatg gcttagtaaa atattttattg	7440
ttcctttatt ctcgtacaa gattttgggc ctctttttt ccttaatgbc acaatgttga	7500
gttcagcatg tgtctgccat ttcatattga cgcttggtca aaaccaagtt tgtctcggtt	7560
tcaagttata aaaataaatt ggacatttaa cttgatctcc aaa	7603

<210> 2853

<211> 3869

<212> DNA

<213> Homo sapiens

<400> 2853

gagccggtgg cgcagggtgc ggggtcctcg agcgccagc ctgggagcat gattgtggac	60
aagctgctgg acgacagccg cggcgagag gggctgcggg acgcggcggg cggctgcggc	120
ctcatgacca gcccgctcaa cctgagctac ttctacggcg cgtcgccgcc gcccgccgcc	180
ccgggcgcct cgcagccagc ctgctcggtc ttggggccct cggcgcccg ctcgcccggc	240
tccgactcct ccgacttctc ctctgcctcg tcgggtgctc cctgcggcgc cgtggagtcc	300
cggctgagag gcggcgcccg cgccgagcgc cagccagttg agccccatat gggggttggc	360
aggcagcaga gaggcccttc tcaaggtgtt cgggtaaga actcagtga ggaactcctg	420
ttgcacatcc gaagtataa acagaaggct tctggccaag ctgtggatga ttttaagaca	480
caagggtgta acatagaaca gttcagagaa ttgaagaaca cagtatcata cagtgggaaa	540
aggaaaaggg ccgattcgtt gtctgatgga cctgcttgca aaaggccagc tctgttgcac	600
tcccaatttt tgacaccacc tcaaacacca acgcccgggg agagcatgga agatgttcat	660
ctcaatgaac ccaaacagga gagcagtgct gatctgcttc agaacattat caacattaag	720
aatgaatgca gccccgttcc cctgaacaca gttcaagtta gctggctgaa ccccggtgtg	780
gtccctcaga gtcctccccc agagcagtg caggacttcc atggagggca ggtctttct	840
ccacctcaga aatgccaaac attccaagtc aggggctccc aacaaatgat agaccaggct	900

tcctctgtacc	agttattctcc	acagaaccag	catgtagagc	agcagccaca	ctacaccac	960
aaaccaactc	tggaaatagc	tccttttccc	atacctcccc	agtccccgc	ttaatgaacca	1020
aacctctttg	atgggtccaga	atcacagttt	tgcccaaacc	aaagcttagt	ttcccttctt	1080
gggtgatcaa	gggaatctga	gaatattgct	aatccccatg	agacttcctc	cagtgttcag	1140
cagcaaatg	atgctcactt	gcacagcttc	agcatgatgc	ccagcagcgc	ctgtgaggcc	1200
atgggtggggc	acgagatggc	ctctgactct	tcaaacactt	cactgccatt	ctcaaacatg	1260
ggaaatccaa	tgaacaccac	acagtttagg	aaatcacttt	ttcagtggca	gggtggagcag	1320
gaagaaagca	aattggcaaa	tatttcccaa	gaccagtttc	tttcaaagga	tgcagatggt	1380
gacacgttcc	ttcatattgc	tgttgcccaa	gggagaaggg	cactttccta	tgttcttgca	1440
agaaagatga	atgcacttca	catgctggat	attaagagag	acaatggaca	gagtgccttt	1500
cagggtggcag	tggtctccaa	tcagcatctc	attgtgcagg	atctgggtgaa	catcggggca	1560
cagggtgaaca	ccacagactg	ctggggaaga	acacctctgc	atgtgtgtgc	tgagaagggc	1620
cactcccagg	tgcttcaggc	gattcagaag	ggagcagtgg	gaagtaatca	gtttgtggat	1680
cttgagggcaa	ctaactatga	tggcctgact	ccccttcact	gtgcagtcac	agcccacaat	1740
gctgtggtcc	atgaactcca	gagaaatcaa	cagcctcatt	cacctgaagt	tcaggagcct	1800
ttactgaaga	ataagagtct	ggttgatacc	attaagtgcc	taattcaaat	gggagcagcg	1860
gtggaagcga	aggatcgcaa	aagtggccgc	acagccctgc	atttggcagc	tgaagaagca	1920
aatctggaac	tcatttcgct	ctttttggag	ctgccaggtt	gcctgtcttt	tgtgaatgca	1980
aaggcttaca	atggcaaacac	tgccctccat	gttgcctgca	gcttcagcta	tcgggttgaca	2040
caattagatg	ctgtccgcct	gttgatgagg	aaggagcag	acccaagtac	tcggaacttg	2100
gagaacgaac	agccagtga	tttgggtccc	gatggccctg	tgggagaaca	gatccgacgt	2160
atcctgaagg	gaaagtcatt	tcagcagaga	gctccaccgt	attagctcca	ttagcttgga	2220
gcctggctag	caacactcac	tgtcagttag	gcagtcctga	tgtatctgta	catagaccat	2280
ttgccttata	ttggcaaatg	taagtgtgtt	ctatgaaaca	aacataattta	gttcactatt	2340
atatagtggg	ttatattaaa	agaaaagaag	aaaaatatct	aatttctctt	ggcagatttg	2400
catatttcat	acccagggtat	ctgggatcta	gacatctgaa	tttgatctca	atggtaacat	2460
tgccctcaat	taacagttag	ttttgagtag	gaaaggactt	tgatttgtgg	cacaaaaacat	2520
tattaatata	gctattgaca	gtttcaaagc	aggtaaattg	taaatgtttc	tttaagaaaa	2580
agcatgtgaa	aggaaaaagg	taaatacagc	attgaggcct	catttggcct	tagtccctgg	2640
gagttactgg	cgttggacag	gcttcagtca	ttggactaga	tgaagggtgt	ccatgggttag	2700
aatttgatct	ttgcaaaactg	tatataattg	ttatttttgt	ccttaaaaat	attgtacata	2760

cttggttggt aacatgggtca tatttgaaat gtataagtc ataaaataga aaagaacaag 2820
 tgaattgttg ctatttataaa aaatttttaca attcttacta aggagttttt attgtgtaat 2880
 cactaagtct ttgtagataa agcagatggg gagttacgga gttgttcctt tactggctga 2940
 aagatatatt cgaattgtaa agatgctttt tctcatgcat tgaaattata cattatttgt 3000
 aggggaattgc atgctttttt ttttttttct cccgagacag ggtcttgctc tggcgcccag 3060
 gctggagtag agtggcatga tcttggtcca cttcagcctt gacttgggct caagtgtacc 3120
 tcctacctga gccttctgag taactgggac tacagggtgt cactcctcgc ctggctaatt 3180
 ttttattttt tgtacaggca ggatcttgcc accttgccca ggctgggtctt gaactcctga 3240
 gctcatgcca tctgcctgcc ttagtctccc aaaatgctgg gattacagga gtgagccacc 3300
 atgcccggct ggcagttgca tggaaagagaa cacctcttta tggcttacc tctagaattt 3360
 ctaattttatg tgttctgttg aaatttttgt tttttacct ttattgaaac aacaaaaagt 3420
 cagtattgaa acatatcttc ctgttttctg ttgtcaaatg atgataatgt gccatgatgt 3480
 tttatatata tcattcagaa aaagttttat tttttaataa cattctatta acattatttt 3540
 gcttgccgct ggcagtcctg aggaatgtat ttggctttga ttacacacta agtttttgta 3600
 ataaatttga ctcattaaaa accttttttt tttaaaaaaa aaaaaagaa aatctcatta 3660
 gtgaacttat ctttgcagct gagtacttaa attcttttta aaaagatacc ctttggtattg 3720
 atcaccattgt ttgaccagat atgtcttgta gacacgttag ttataatcac cttgtatctc 3780
 taaatatggt gtgatatgaa ccagtcattt cacattggaa aaactgatgg ttttaataaa 3840
 actaattcac taataaaaaa aaaaaaaaaa 3869

<210> 2854

<211> 3498

<212> DNA

<213> Homo sapiens

<400> 2854

cgggagtagc gcagtcgcca aagccgccgc tgccaaagct gccgccacta gccgggcatg 60
 gccatggcgt ccccgcccat cgggcagcgc ccgtaccgc tactcttgga ccccgagccg 120
 ccgcgtatc tacagagcct gagcggcccc gagctaccgc cgcgcgcccc cgaccggtec 180
 tcgcgcctct gtgtcccgcc gccctctctc actgcgccgc gggcgcgcca gggcgcgacc 240
 gcccgagggg ctgccccggg gaacctggag ccccccccc ggccctcccg acccgctcgc 300
 ccgctccggc ctggcttgca gcagagactg cggcgcgccc ctggagcgcc ccgacccccg 360
 gacgtgcgga gcactcttca gcagccgcag gatcccgag tccggcgga gcgaggcgag 420
 gggcaactgt tcgcccagtt ggtgctgccg ggcggccccg gctggtgtga cctgtgcgga 480

cgagagggtgc tgcggcaggc gctgcgctgc actaactgta aattcacctg taccacagaa	540
tgccgcagcc tgatccagtt ggactgcagt cagcaggagg gtttatcccg ggacagaccc	600
tctccagaaa gcacccctac cgtgaccttc agccagaatg tctgtaaacc tgtggaggag	660
acacagcgcc cgcccacact gcaggagatc aagcagaaga tcgacagcta caacacgcga	720
gagaagaact gcctgggcat gaaactgagt gaagacggca cctacacggg tttcatcaaa	780
gtgcattctga aactccggcg gcctgtgacg gtgcctgctg ggatccggcc ccagtcctac	840
tatgatgcc tcaaggaggt gaacctggcg gctaccacgg acaagcggac atccttctac	900
ctgcccttag atgccatcaa gcagctgcac atcagcagca ccaccacgt cagtggagtc	960
atccaggggc tgctcaagaa gtccatgggt gtggacaatc ccagaagtt tgacttttt	1020
aagcggatac acaaggacgg acaagtgtc ttcagaaaac tctcattgc tgacgcccc	1080
ctctacctgc gcctgttgc tgggcctgac acggagggtc tcagctttgt gctaaaggag	1140
aatgaaactg gagaggtaga gtgggatgcc ttctccatcc ctgaacttca gaacttctc	1200
tctctctggt gcattcagat ttatttgtat tattaattat tattttgcaa cagacactt	1260
ttctcaggac atctctgcca ggtgcatttg tgcctgccca gcagttccag ctgtggcaaa	1320
agtctcttcc atggacaagt gtttgacga gggttcagct gtgcccggcc ccaggctgtg	1380
ccccaccaca gattctgcca aggatcagaa ctcatgtgaa acaaacagct gacgtctct	1440
ctcgatctgc aagccttcca ccaacaaaat agttgcctct ctctcacca aactggaacc	1500
tcacaccagc cgcaaaagga aggaagaaag gtttttagagc tgtgtgttct ttctctggca	1560
ttgattctct tttgagttct ctacttgcc acgtacagga ccattattta tgagtgaana	1620
gtttagcac attccttttg caggctctgag ctaagccctt gaaagcaggg taatgtctat	1680
aaaaggactg ttcccggcg cccaagggtc ctgttggtta cacttaaggg aagtttataa	1740
agctactggc ccagatgct cagggttaagg agcaccaag ctgaggctgg ctacagatc	1800
tcagagaag ctgcagcctg ccctggccct ggctctggcc ctggcccaca ttgcacatgg	1860
aaacccaaag gcatatatct gcgtatgtgt ggtacttagt cacatctttg tcaacaaact	1920
gttcgttttt aagttacaaa ttgaattta atgttgtcat catcgtcatg tgtttcccca	1980
aagggagacc agtcattgac catttaaaaa gtctcctgct aagatggaa atcacagct	2040
aagagaaagc caaaaagcaa tgcagagaaa ggtgtccaag ctgtcttcag ccttccccag	2100
ctaaagagca gaggagggtc tgggtactct ggggtcccca tcggcctcca gcactgcctc	2160
cctctccca ctgcgactct gggatctcca ggtgctgccc aaggagttgc cttgattaca	2220
gagaggggag cctccaattc ggccaacttg ggtccttct tgttttgaag catggggcag	2280

acccggcact gcgctcggag agccgggtggg cctggcctcc ccgtcgacct cagtgccttt 2340
 ttgtttttcag agagaatatag gagtagggcg agtttgcctg aagctctgct gctggcttct 2400
 cctgccagga agtgaacaat ggcggcgggtg tgggagacaa gccaggaga gccgcgttc 2460
 agtatgggtt gagggtcaca gacctccctc ccatctgggt gcctgagttt tgactccaat 2520
 cagtataacc agaccacatt gacagggagg atcaaatctc tgacttatat ttgcactggc 2580
 ttcttgttta ggctgaatcc taaaataaat tagtcaaaaa attccaacaa gtatgccagga 2640
 ctgcagagac actccagtgc agagggagaa ggacttgtaa ttttcaaagc agggctgggt 2700
 ttccaaccca gcctctgaga aaccatttct ttgctatcct ctgcctctcc aagtcctctc 2760
 tgggtcgggt caagcccaag cttgttcgtg tagcttcaga agttccctct ctgaccagg 2820
 ctgagtcact actgcccctg atcccagaag gaatgctgac ccctcgtcgt atgaactgtg 2880
 catagtctcc agagcttcaa aggcaacaca agctcgcaac tctaagattt ttttaaacca 2940
 caaaaacctt ggtagccat ctcatgctca gccttatcac ttccctccct ttgaaactc 3000
 tctccctgct gtatatataa gggagcagggt ggagagtcac tttccttcgt cctgcatgtc 3060
 tctaactata atagaaggca tggctcctgc tgcaaccgct gtgaatgctg ctgagaacct 3120
 ccctctatgg ggatggctat tttatttttg agaaggaaaa aaaaagtcac gtatatatac 3180
 acataaaggc atatagctat atataaagag ataagggtgt ttatgaatg agaaaattat 3240
 tggacaattc agactttact aaagcacagt tagacccaag gcctatgctg aggtctaacc 3300
 ctctgaaaaa agtatagat cgagtaccgc ttccctccca gaggtgggag taactgctgg 3360
 tagtgccctc tttgggtgtg ttgctcagtg tgtaagtgtt tgtttccagg atattttctt 3420
 tttaaatgtc tttcttatat ggggttttaa aaaaagtaat aaaagcctgt tgcaaaaatg 3480
 aaaaaaaaaa aaaaaaaaaa 3498

<210> 2855
 <211> 1505
 <212> DNA
 <213> Homo sapiens

<400> 2855
 gctggtcgga ggcctgcagt gctgtcggcg agaagcagtc gggtttgag cgcttgggtc 60
 gcgttggtgc gcggtggaac gcgccagggt accccagttc ccgcgagcag ctccgcgccg 120
 cgctgagag actaagctga aactgctgct cagctcccaa gatggtgccca cccaaattgc 180
 atgtgctttt ctgctctcgc ggctgctgg ctgtggttta tcttttgac tggcaatata 240
 taaatcctgt tgcccatatg aaatcatcag catgggtcaa caaaatacaa gtactgatgg 300
 ctgctgcaag ctttggtccaa actaaaatcc cccggggaaa tgggccttat tccgttggtt 360

gtacagactt aatgtttgat cacactaata agggcacctt cttgcgttta tattatccat 420
 cccaagataa tgatgcgctt gacacccttt ggatcccaaa taaagaatat ttttgggggc 480
 ttagcaaatt tcttgaaca cactggctta tgggcaacat tttgaggta ctctttggtt 540
 caatgacaac tcctgcaaac tgggaattccc ctctgaggcc tggtgaaaaa tatccacttg 600
 ttgttttttc tcatggctctt ggggcattca ggacacttta ttctgctatt ggcattgacc 660
 tggcatctca tgggtttata gttgctgctg tagaacacag agatagatct gcactctgcaa 720
 ctactattt caaggaccaa tctgctgcag aaatagggga caagtcttg ctctacctta 780
 gaacctgaa acaagaggag gagacacata tacgaaatga gcaggtagcg caaagagcaa 840
 aagaatgttc ccaagctctc agtctgattc ttgacattga tcatggaaa cagtgaga 900
 atgcattaga tttaaagttt gatatggaac aactgaagga ctctattgat agggaaaaaa 960
 tagcagtaat tggacattct tttggtggag caacgggtat tcagactctt agtgaagatc 1020
 agagattcag atgtggtatt gccctggatg catggatgtt tccactgggt gatgaagtat 1080
 attccagaat tctcagccc ctctttttta tcaactctga atatttcaa taccctgcta 1140
 atatcataaa aatgaaaaaa tgctactcac ctgataaaga aagaaagatg attacaatca 1200
 ggggttcagt ccaccagaat tttgctgact tcacttttgc aactggcaaa ataattggac 1260
 acatgctcaa attaaagga gacatagatt caaatgtagc tattgatctt agcaacaaag 1320
 ctccattagc attcttaca aagcatttag gacttcataa agattttgat cagtgggact 1380
 gcttgattga aggagatgat gagaatctta ttccagggg caacattaac acaaccaatc 1440
 aacacatcat gttacagaac tcttcaggaa tagagaata caattaggat taaaataggt 1500
 tttttt 1505

<210> 2856
 <211> 5220
 <212> DNA
 <213> Homo sapiens

<400> 2856
 cagtcgctcc gagcggccgc gagcagagcc gccagccct gtcagctgcg ccgggacgat 60
 aaggagttag gccaggggcg gatgacactc attgattcta aagcatcttt aatctgccag 120
 gcggaggggg ctttgcctgt ctttcttggg ctattccaga gaggacaact gtcactctggg 180
 aagtaacaac gcaggatgcc ccctggggtg gactgcccc tgggaattctg gaccaaggag 240
 gagaatcaga gcgttgtgtg tgacttctg ctgccacag gggctctacct gaacttccct 300
 gtgtcccga atgccaacct cagcaccatc aagcagctgc tgtggcaccg cgcccagtat 360
 gagccgctct tccacatgct cagtggcccc gaggcctatg tgttcacctg catcaaccag 420

acagcggagc agcaagagct ggaggacgag caacggcgct tgtgtgacgt gcagcccttc	480
ctgcccgtcc tgcgcctggg gggccgtgag ggcgaccgcg tgaagaagct catcaactca	540
cagatcagcc tccatcatcg caaaggcctc caccagtttg actccttggt cgaccagaaa	600
gtaacgact ttcgcgccaa gatgtgccaa tctcgcagg aggcggcgcg ccgcggcgag	660
cagctgggct gggaggcctg gctgcagtac agtttcccc tgcagctgga gccctcggt	720
caaacctggg ggcctgggtac cctgcggctc ccgaaccggg cccttctggg caacgttaag	780
tttgagggca gcgaggagag ctccaccttc caggtgtcca ccaaggacgt gccgctggcg	840
ctgatggcct .gtgccctgcg gaagaaggcc acagtgttc gccagccgct ggtggagcag	900
ccggaagact acacgctgca ggtgaacggc aggcagtagt acctgtatgg caactaccgc	960
ctctgccagt tccagtacat ctgcagctgc ctgcacagtg ggttgacccc tcacctgacc	1020
atggtccatt cctcctccat cctcgccatg cgggatgagc agagcaaccc tgccccccag	1080
gtccagaaa cgcgtgccaa accacctccc attcctgcga agaagccttc ctctgtgtcc	1140
ctgtggtccc tggagcagcc gtccgcatac gagctcatcc agggcagcaa agtgaacgcc	1200
gacgagcgga tgaagctggg ggtgcaggcc gggcttttcc acggcaacga gatgctgtgc	1260
aagacggtgt ccagctcgga ggtgagcgtg tgctcggagc ccgtgtggaa gcagcggctg	1320
gagttcgaca tcaacatctg cgacctgccc cgcattgccc gtctctgctt tgcgctgtac	1380
gccgtgatcg agaaagccaa gaaggctcgc tccaccaaga agaagtccaa gaaggcggac	1440
tgccccattg cctgggccaa cctcatgctg ttgactaca aggaccagct taagaccggg	1500
gaacgctgcc tctacatgtg gccctccgtc ccagatgaga agggcgagct gctgaacccc	1560
acgggcactg tgcgcagtaa ccccaacacg gatagcggcg ctgccctgct catctgcctg	1620
cccgaggtgg ccgcgacccc cgtgtactac cccgccctgg agaagatctt ggagctgggg	1680
cgacacagcg agtgtgtgca tgtcaccgag gaggagcagc tgcagctgcg ggaatctctg	1740
gagcggcggg ggtctgggga gctgtatgag cagagaagg acctggtgtg gaagctgcgg	1800
catgaagtcc aggagcattt cccgaggcg ctageccggc tgctgctggt caccaagtgg	1860
aacaagcatg aggatgtggc ccagatgctc tacctgctgt gtcctgccc ggagctgccc	1920
gtcctgagcg cctggagct gctagacttc agcttcccc attgccacgt aggtccttc	1980
gccatcaagt cgctgcggaa actgacggac gatgagctgt tcagtagctt gctgcagctg	2040
gtgcaggctc tcaagtacga gtccctacct gactgcgagc tgaccaaatt cctgctggac	2100
cgggccctgg ccaaccgaa gatcgccac ttccttttct ggcacctccg ctccgagatg	2160
cacgtgccgt cggtggccct gcgcttcggc ctccatctgg aggcctactg caggggcagc	2220
accaccaca tgaaggctgt gatgaagcag ggggaagcac tgagcaaact gaaggccctg	2280

aatgacttcg tcaagctgag ctctcagaag accccaagc cccagaccaa ggagctgatg	2340
cacttggtgca tgcggcagga ggcctaccta gaggccctct cccacctgca gtccccactc	2400
gacccacga cctgctggc tgaagctcgc gtggagcagt gcaccttcat ggactccaag	2460
atgaagcccc tgtggtcat gtacagcaac gaggaggcag gcagcggcgg cagcgtgggc	2520
atcatcttta agaacgggga tgacctccgg caggacatgc tgacctgca gatgatccag	2580
ctcatggacg tctgtggaa gcaggagggg ctggacctga ggatgacccc ctatggctgc	2640
ctccccaccg gggaccgcac aggcctcatt gaggtggtac tccgttcaga caccatcgcc	2700
aacatccaac tcaacaagag caacatggca gccacagccg ccttcaacaa ggatgcctcg	2760
ctcaactggc tgaagtccaa gaaccggggg gaggccctgg atcgagccat tgaggagtte	2820
accctctcct gtgctggcta ttgtgtggcc acatatgtgc tgggcatttg cgatcgccac	2880
agcgacaaca tcatgatccg agagagtgagg cagctgttcc acattgattt tggccacttt	2940
ctgggggaatt tcaagaccaa gtttggaatc aaccgcgagc gtgtcccatc catcctcacc	3000
tatgactttg tccatgtgat tcagcagggg aagactaata atagtgaag atttgaacgg	3060
ttccggggct actgtgaaag ggcctacacc atcctgcggc gccacgggct tctcttcctc	3120
cacctctttg cctgatgcg ggcggcaggc ctgcctgagc tcagctgtgc caaagacatc	3180
cagtatctca aggactccct ggcactgggg aaaacagagg aggaggcact gaagcacttc	3240
cgagtgaagt ttaacgaag cctccgtgag agctggaaaa ccaaagtga ctggctggcc	3300
cacaacgtgt ccaaagacaa caggcagtag tggctcctcc cagccctggg cccaagagga	3360
ggcggctcgc ggtcgtgggg accaagcaca ttggtcctaa aggggctgaa gagcctgaac	3420
tgcacctaac gggaaagaac cgacatggct gccttttgtt tacactggtt atttatttat	3480
gacttgaaat agtttaagga gctaaacagc cataaacgga aacgcctcct tcattcagcg	3540
gcggtgctgg gcccccgag gctgcacctg gctctcggtc gaggattgtc accccaagtc	3600
ttccagctgg tggatctggg cccagcaaa actgttctcc tcccagagga acctctctcc	3660
caggcctccc gccagatgc ctgggtcctg gcgcctggcg gtcacctggt gcctactgtc	3720
cgacaggatg cctcgatcct cgtgcgaccc accctgtgta tcttccctag actgagttct	3780
ggcagctccc cgaggcagcc ggggtacctc ctgattcag ggatgcttgc tctccacttt	3840
tcaagtgggt ctgggtacg agaattccct catctttctc tactgtaaag tgattttgtt	3900
tgagggtaa aaaataatag atgactcacc acacctctac ggctggggag atcaggccca	3960
gccccataaa ggagaatcta cgctggctct caggacgtgt taaagagatc tgggcctcat	4020
gtagctcacc ccggtcacgc atgaaggcaa aagcaggtca gaagcgaata ctctgccatt	4080

atctcaaaaa tctttttttt tttttttttg agatggggtc ttcctctgtt gccaggctg 4140
 gagtgacgtg gtgcaatctt ggctcactgt aacctccgcc tcccagggtc aagtgtattct 4200
 tcttgccctca gectcctgag tagctgggat tacagggtgtg caccaccgt acccagctaa 4260
 tttttgtatt ttagtagaga cgggggttcc accatgttgg ctgggctggt ctgaaactcc 4320
 tgacctcagg tgatccaccc gcctgagcct ccaaagtgc tgggattaca ggcagtgacc 4380
 accacgcccgc gccactctg ccattgtcta agccacctct gaaagcaggt ttaacaaaa 4440
 ggatgagccc agaactcttc cagaaccatc accttggga acctgctgtg agagtgtctga 4500
 ggtaccagaa gtgtgagaac gagggggcgt gctgggatct ttctctctga ctatacttag 4560
 tttgaaatgg tgcaggctta gtcttaagcc tccaaaggcc tggatttgag cagctttaga 4620
 aatgcaggtt ctagggttcc tcccagcctt cagaagccaa ctaactctgc agatggggct 4680
 aggactgtgg gcttttagca gccacacggg gatcctaaca tatcaggcca tggactcagg 4740
 acctgcccg tgatgctgtt gatttctcaa aggtcttcca aaactcaaca gagccagaag 4800
 tagccgcccc ctacgaggct caggtgccag ctctgttctg attcaccagg ggtccgtcag 4860
 tagtcattgc caccgcggg gcacctccct ggccacacgc ctgttcccag caagtgtctga 4920
 aactcactag accgtctgcc tgtttcgaaa tggggaaagc cgtgcgtgcg cgttatttat 4980
 ttaagtgcgc ctgtgtgcgc ggggtgggga gcacactttg caaagccaca gcgtttctgg 5040
 ttttgggtgt acagtcttgt gtgctggcg agaagaatat ttctatttt ttaagtcat 5100
 ttactgttcc tgtctgggga aggcaagta gtaagtatc actgatgtgg gttgagacca 5160
 gcactctgtg aaaccttgaa atgagaagta aaggcagatg aaaagaaaaa aaaaaaaaaa 5220

<210> 2857

<211> 1158

<212> DNA

<213> Homo sapiens

<400> 2857

gcctgtgtct tggcccctg gtctgtctct cttctccagc atgggtgtgtc tgaagctccc 60
 tggaggctcc agcttggcag cgttgacagt gacactgatg gtgctgagct cccgactggc 120
 ttctgctggg gacaccgcac cagctttctt ggagctgcgt aagctgaggt gtcatttctt 180
 caatgggagc gagcgggtgc ggtacctgga cagatacttc cataaccagg aggagtctct 240
 gcgcttcgac agcgacgtgg gggagtaccg ggcggtgacg gagctggggc ggctgtgcgc 300
 cgagtctctg aacagccaga aggacctctt ggagcagaag cggggccggg tggacaatta 360
 ctgcagacac aactacgggg ttggtgagag cttcacagtg cagcggcgag tccatcctca 420
 ggtgactgtg tatcctgcaa agaccagcc cctgcagcac cacaacctcc tggctctgctc 480

tgtgagtggt ttctatccag gcagcattga agtcaggtagg ttccggaacg gccaggaaga	540
gaaggctggg gtggtgtcca cgggcctgat ccagaatgga gactggacct tccagacct	600
ggtgatgcta gaaacagtgc ctccgagtagg agaggtttac acttgccaag tggagacccc	660
aagcgtaacg agcgctctca cagtggaaatg gagagcacgg tctgaatctg cacagagcaa	720
gatgctgagt ggagtcgggg gctttgtgct gggcctgctc ttccctgggg ccgggctggt	780
catctacttc aggaatcaga aaggacactc tggacttcag ccaacaggat tctgagctg	840
aagtgcagat gacaatttaa ggaagaatct tctgcccag ctttgaggga tgaaaagctt	900
tcccgcctgg ctgttattct tccacgagag agggctttct caggacctag ttgctactgg	960
ttcagcaact gcagaaaatg tctcccttg tggcttctc agttcctgcc cttggcctga	1020
agtcccgaca ttgatggcag cgcctcatct tcaacttttg tgcctccctt tgcctaaacc	1080
ctatggcctc ctgtgcatct gtactcacc tgtaccacaa acacattaca ttattaaatg	1140
tttctcaaag atggagtt	1158

<210> 2858

<211> 6807

<212> DNA

<213> Homo sapiens

<400> 2858

tctagagtaa gaaactagct gagcaacgtg gtgtcacact atacacccat taagacaaca	60
ggcacatgtg tcatgtccat tttgtggaaa agatatgtaa aataatttta agtaaaaaag	120
ataaatataa aaaagtgaat gcatacaaaa caatttcaca aaattgaatg ttactcaaaa	180
atcacagctc attttaagct gcacaaaata gtcatttttt tctttataat tgctcaaatt	240
cataatcaaa cagaagaaag ttctctgtctt ggaagtagtg ctatgcccc attcttccag	300
agccagtact ttaacaatt ccatttcatt attttctgt agactaatc ttaggcacac	360
agcatatctc tcttcaagca ttaaaaaaat ctcttttagag tcagtggatc aatagacagt	420
tctgttttc cacacaactg aaagggtgga gcccccaaac cacaaggga agaaggaggt	480
taaaagatgt taaatactgg ggccagctca ccttggtcag ctagcactc tgacctagca	540
gtcaacatga aggctctcat tgttctgggg cttgtctctc tttctgttac ggtccagggc	600
aaggctcttg aaagggtgta gttggccaga actctgaaaa gattgggaat ggatggctac	660
aggggaatca gcctagcaaa ctgtaagtct actctccata attccagaga attagctacg	720
tatggaacag acactaggag agaaggaaga agaagaagg gctttgagtg aatagatgtt	780
ttattttctt gtgggtttgt atacttaca tggctaaaa catcagtttg gttctttata	840
accagagata ccgataaag gaatacgggc atggcagggg aaaattccat tctaagtaaa	900

acaggacctg ttgtactggt ctagtgtctg gaagtttgct ggggtcctga gattcaatgg 960

cacatgtaag ctgactgaaa gatacatttg aggacctggc agagctctct caagtccttg 1020

gtatgtgact ccagttattt cccattttga acttgggctc tgagagccta gagtgatgca 1080

gtatttttct tgtcttcaag tcccctgccg tgatgtggga tttttatttt tatttttatt 1140

ttattttatt ttatttttaa agacagtctc actgtgtggc ccaggctgga gtgcagtggc 1200

atgatctcag ctcaactgca cctctgcctt ctgggtcctc gtgattctcg tgcctcagcc 1260

ttctgagtag ctgtgactac aggtgtgtac caccacacc agctaatttt ttgtattttc 1320

agtagagatg gggtttcacc atgttgccca agctggctct gaactcctcg cctcaaatga 1380

tctgccacc tcagcctccc aaagtggtag gattacaggt gtgaacctc gacccagcc 1440

gacatgggat ttttaacagt gatgttttta aagaatatat tgaattccct acacaagagc 1500

agtaggaacc tagttccctt cagtcactct ttgtatagga tcccagaaac tcagcatgaa 1560

atgttttatt atttttattc actctacttg attaactatc tttcattttc tcccacacaa 1620

ttcaagatgt gccatgagga aaagtatttt tatagttag tacatagttg tcgatgtaat 1680

aatctctgta gttttcagat tgaattcaga catttccctc caatagctat ttttgaatga 1740

atgagtgaag ggatgaaatc acggaatagt cttgttttca agattctaac ttgatattca 1800

aattcacctt tagatattat aagaaaattt ctatcagaaa atccttatgt ttttctgatt 1860

aaaaaaagca tttttccatc agcctatgta tctgctatga atttcaaaa tctactcaac 1920

agctctgttg atttttctgt tcttggtgta atgttgctcg agggatggga gcacgggaag 1980

ggtaaaagca atggaagaaa catgtatttt aatattttta aagtatgtta tattgttcgt 2040

tggtgttaca agatgatttg cattacaaaa ggattctctt acaagtcctt tatcttaaca 2100

ctaaagtgtc aagatatatt ataagtaaat ctttatactt ataaaacaaa tcagtaaaat 2160

agaagtagct aagtagaact gattttgcta tagagtataa gtcacttagt gttgtctggt 2220

attactaaaa ataagttctt ttcagggatg tgtttggcca aatgggagag tggttacaac 2280

acacgagcta caaactacaa tgctggagac agaagcactg attatgggat atttcagatc 2340

aatagccgct actgggtgaa tgatggcaaa acccaggag cagttaatgc ctgtcattta 2400

tctgcagtg gtaagacaag ctaatatattg accaatctgg ttatacttac aagaattgag 2460

actcaataca aatgaaaaag ccttgaaagg ttcattgagg acctagaaaa actacatctc 2520

aacttcaga aagtcattat tattttcctc ataattccct gagtaagaaa tttaaagaag 2580

tggtatcata aaaggttgat gttttttaat atacagaagt ttctggaatg acctattaat 2640

ttactgtcaa tggccttact gatgctttgt ccagaacaat gccattgctc ctgcttactt 2700

tggggaggtt ttgggataat ttagtgtat ggtccttttt caattgtttt actttttttt 2760

ttatgaaatg ttctaaatgt atagaaaatt agagacatta gtataataaa cagccatatg 2820
 cccattatgc actttaaaaa ttgttaacat ttggccatag ttgcttcttc tatgcctttt 2880
 tttttttttt tttttttttt tgctgagagt tttttgttg gttttgtttt gttttatttt 2940
 gagacagggt ctccgtgtcc caggctgtag tcagtggcac catcacagct cactgcagct 3000
 caagtgatca tcccaccaca gctcccaag tagctgggac tacaggtgtg caccaccatg 3060
 cctggcaaat ttttgaaatt tttagtacag gcaaatcttg tgttgccag gctggctctg 3120
 aactcctgag ttcaagcaat ctccccacct cagcctcctt aagctgctgg aattacaggc 3180
 gttagcactg tacctggcta ctgctgagag acttttaagt gaattaggaa catgatgata 3240
 ttccatttct aaattcttta gtttacctt tcaaaaaata cagttcctgt agaattatta 3300
 ttgtaataaa caaattaact taaggattta tttatttga gtgaacaaa tttttactg 3360
 aactcataaa aatagaaata ccatgtggaa tcctcagtg caaaaatatt gcagaaatct 3420
 tgcaaggtg atattattaa attgttaaat attaaaatc ccaataaaga acattaatct 3480
 tatttctaaa atccagttaa ttaaaaaaat ttatattata taataatatt tggtcattaa 3540
 ataaaaatta gaaaatacaa ataagaaaaa taacacccat aatcttacta cccagagggt 3600
 tataaccatg ggtaaattct ggtatatatt ctccagaat gtatatcaat catgtgtatg 3660
 aatgttaaat tatatcatc acatataaac ccacatacaa acatgtaaat actgtgtgct 3720
 ttgcaaaaa ttaaatgtta ttatacacac ggctttacaa ttgcttctt atcacacaaa 3780
 attatttgca tgcagcaaaa tacaaatcgg tttttaatga tcttttgctc cattttccag 3840
 atgagaaaaa aatacaaatc tgtatcatca ttttaaaaga atgactagaa ttttaataa 3900
 tgaatattct ataatttact gatccaattg ttactattga gcacttaggt tgtttccatt 3960
 tttccctcat aaattgctat gaatagcttt ttgtatacat ctttgggtgc atttcttatt 4020
 tcttttggat aaattttcaa taatagaact gctgagtaaa atatcactag gtgttttttt 4080
 acagtgtcta gtgcaagaaa gacctttaat cattttgtta atactccag agcttccaat 4140
 gacttttgta aatgaagaaa aaaatgcttc atttcatgct gaatgggaga gaatgaagag 4200
 agttttcccc aacaattaca catatatgga ctcatagaaa ataatatctt accatttctt 4260
 ccacagccta acagaaaaaa gctggctaaa cctaaattta aaataaaata tctattaaag 4320
 tttttattcc ttaccacctg tctttcagct ttgctgcaag ataacatcgc tgatgctgta 4380
 gcttggtcaa agagggttgt ccgtgatcca caaggcatta gagcatggta tgttttaagt 4440
 gttaaaaggg aaaactatct tactctactg ttgatataa caatgagagc agacttttaa 4500
 agaccaaaat atgctaata caactcaaaa ttgcagcttt tggcttatgc taaatgatgt 4560

attacctaca tccttgaaga aacaatctac tttaactgat ccagaatctt actctttttac 4620
tcctcaattt attttagggg atttctagag ttttaagatg cttcacactc tatcagttcc 4680
ttgtcatatc ttgaaattct ttttagaata agtaagtgtg ggccgggacac agtgctcacg 4740
cctgtaatcc cagcactttg ggagaccgag gcagatggat cacctgaggt caggagtctg 4800
agaccagcct gcctaacatg gcaaaacccc atctccacta aaaatacaaa aaattagctg 4860
gggtgtgtgc aggtgcctgt aatcccagcc actcgggagg ctgaggcagg agacttgctt 4920
gaacccggga ggtggaggtt gcagaggatt gcgccattgt acttcagcct gggcgacaga 4980
gtgagactct gtctcaaata aatagcataa aaaataaacg tgggaattcac tttgcagttg 5040
ctgctgtaca acgcacatta ctcaatcttt atgttcggca ttctatgtct tactgagaaa 5100
tttgggtagg agtgaagtat tttgtataca tatcttcatt taataaatag caatagctgg 5160
gtctatctta ctatttttat tattgataaa atattttgtt tccccaggga gtgcgaagta 5220
tgtatattac aatgaagata tgttttaacc ttccaccatt tgcttcatct ttttctacag 5280
gggtggcatg agaaatcggt gtcaaacag agatgtccgt cagtatgttc aaggttgtgg 5340
agtgtaactc cagaattttc ctctctcagc tcattttgtc tctctcacat taaggagta 5400
ggaattaagt gaaaggctac actaccatta tttcccttc aaacaataa tatttttaca 5460
gaagcaggag caaaatatgg cctttctctc aagagatata atgttcacta atgtggttat 5520
tttatattaa gcctacaaca tttttcagtt tgcaaataga actaatactg gtgaaaattt 5580
acctaaaacc ttggttatca aatacatctc cagtacattc cgttcttttt tttttttttt 5640
tttttttttg agacagtctc gctctgtcgc ccaggctgga gtgcagtggc gcaatctcgg 5700
ctcactgcaa cctccacctc ccgggttcac gccattctcc tgccctagcc tcccagtag 5760
ctgggattac gggcgcccg caccacgccc ggctaatttt ttgtattttt agtagagaca 5820
gggtttcacc gtgttagcca ggatggtctc gatctcctga ccttgtagtc caccacctc 5880
ggcctcccaa agtgctggga ttacaggcgt gagccactgc gccgggccac attcagttct 5940
tatcaaagaa ataaccaga cttaatcttg aatgatacga ttatgccaa tattaagtaa 6000
aaaatataag aaaagggttat cttaaataga tcttaggcaa aataccagct gatgaaggca 6060
tctgatgctc tcactgtgtc agtcatctcc aaaaacagta aaaataacca ctttttgttg 6120
ggcaatatga aattttttaa ggagtagaat accaaatgat agaacagac tgccctaatt 6180
gagaattttg atttttttaa gtgtgtttct ttctaaattg ctgttcctta atttgattaa 6240
tttaattcat gtattatgat taaatctgag gcagatgagc ttacaagtat tgaataaatt 6300
actaattaat cacaatgtg aagttatgca tgatgtaaaa aatacaaaaca ttctaattaa 6360
aggctttgca acacatgcct tgtctgtttt tatttagact cctatagtgt ctctgaagaa 6420

aagaatacac atatttgaaa aaatatgatt tggctgctctt aatatctctt atatcgtcac 6480
 ttacctcact taaatagtcga gatattgctg gagaaaaatt cacaagcatg ctgacaggtc 6540
 tcacttttaa ttcataacca taaatctcaa atgagccctc aagtctgctc gaccatttta 6600
 gttactcttc tacaatcctt ccatttttat gtccctagtc tccaaaatga ctgttactat 6660
 tttacttttc ctcttctctc ttcaaagcct caagacacac attcagcctc ctctctgcc 6720
 cccttatcct ccaccctcct ctgctctcag cagataaact ggcctcatat tacacttcta 6780
 aaacaaaagc aacttcatac caagctt 6807

<210> 2859

<211> 1497

<212> DNA

<213> Homo sapiens

<400> 2859

accgctggcc ccagggaaaag ccgagcggcc accgagccgg cagagaccca ccgagcggcg 60
 gcggaggagg cagcgccggg gcgcacgagg gcaccatggc ccagacgccc gccttcgaca 120
 agcccaaagt agaactgcat gtccacctag acggatccat caagcctgaa accatcttat 180
 actatggcag gaggagaggg atcgccctcc cagctaacac agcagagggg ctgctgaacg 240
 tcattggcat ggacaagccg ctccaccttc cagacttctt ggccaaattt gactactaca 300
 tgctctctat cgcgggctgc cgggaggcta tcaaaaggat cgcttatgag ttgttagaga 360
 tgaaggccaa agagggcggt gtgtatgtgg aggtgcggta cagtcgcgac ctgctggcca 420
 actccaaagt ggagccaatc cctggaacc aggtctgaag ggacctcacc ccagacgagg 480
 tggtagccct agtgggccag ggctgcagg aggggggagc agacttcggg gtcaaggccc 540
 ggtccatcct gtgtgcctg cgccaccagc ccaactggtc ccccaagggt gtggagctgt 600
 gtaagaaact ccagcagcag accgtggtag ccattgacct ggctggagat gagaccatcc 660
 caggaagcag cctcttgctt ggacatgtcc aggcctacca ggaggctgtg aagagcggca 720
 ttcaccgtac tgtccacgcc ggggaggtgg gctcggccga agtagtaaaa gaggctgtgg 780
 acatactcaa gacagagcgg ctgggacacg gctaccacac cctggaagac caggcccttt 840
 ataacaggct gcggcaggaa aacatgcact tcgagatctg cccctggctc agctacctca 900
 ctggtgcctg gaagccggac acggagcatg cagtcattcg gctcaaaaat gaccaggcta 960
 actactcgct caacacagat gaccgcgtca tcttcaagtc caccctggac actgattacc 1020
 agatgaccaa acgggacatg ggctttactg aagaggagtt taaaaggctg aacatcaatg 1080
 cggccaaatc tagtttcttc ccagaagatg aaaagaggga gcttctcgac ctgctctata 1140
 aagcctatgg gatgccacct tcagcctctg cagggcagaa cctctgaaga cgccactcct 1200

ccaagccttc accctgtgga gtcaccccaa ctctgtgggg ctgagcaaca tttttacatt 1260
 tattccttcc aagaagacca tgatctcaat agtcagttac tgatgtctct gaaccctatg 1320
 tgtccatttc tgcacacacg tatacctcgg catggccgcg tcacttctct gattatgtgc 1380
 cctggcaggg accagcgccc ttgcacatgg gcattggtta atctgaaacc ctcttctctgt 1440
 ggcaacttgt actgaaaatc tgggtgctcaa taaagaagcc catggctggt ggcatgc 1497

<210> 2860
 <211> 3151
 <212> DNA
 <213> Homo sapiens

<400> 2860
 cccggccaga caccctcacc tgcgggtgcc agctgccag gctgaggcaa gagaaggcca 60
 gaaacctatgc ccattgggtgc tctgcaaccg ctggccacct tgacctgct ggggatgtctg 120
 gtgccttctc gcctcggacg gctcagctgg tatgaccac atttccaggc aaggtccacc 180
 cgttccaaact cgaagtgcc gggccagctg gaggtctacc tcaaggacgg atggcacatg 240
 gtttgacgac agagctgggg ccggagctcc aagcagtggg aggacccag tcaagcgctca 300
 aaagtctgcc agcggctgaa ctgtgggggt cccttaagcc ttggccctt ctttgtcacc 360
 tacacacctc agagctcaat catctgctac ggacaactgg gctccttctc caactgcagc 420
 cacagcagaa atgacatgtg tcactctctg gccctgacct gcttagaacc ccagaagaca 480
 acacctccaa cgacaaggcc ccgcccacc acaactccag agccacagc tcctcccagg 540
 ctgcagctgg tggcacagtc tggcgccag cactgtgccg gcgtggtgga gttctacagc 600
 ggcagcctgg ggggtaccat cagctatgag gcccaggaca agaccaggga cctggagaac 660
 ttctctgca acaacctcca gtgtggctcc ttcttgaagc atctgccaga gactgaggca 720
 ggagagagccc aagaccaggg ggagccacgg gaacaccagc ccttgccaat ccaattggaag 780
 atccagaact caagctgtac ctccctggag cattgtctca ggaaaatcaa gccccagaaa 840
 agtggccgag ttcttgccct cctttgtctc ggtttccagc ccaaggtgca gagcgtctg 900
 gtggggggga gcagcatctg tgaaggcacc gtggaggtgc gccagggggc tcagtgggca 960
 gccctgtgtg acagctcttc agccaggagc tcgctgcggt gggaggagggt gtgccgggag 1020
 cagcagtggt gcagcgtcaa ctctatcga gtgtggagc ctggtgaccc aatctccgg 1080
 gggctcttct gtccccatca gaagctgtcc cagtgccacg aactttggga gagaattcc 1140
 tactgcaaga aggtgtttgt cacatgccag gatccaaacc ccgcaggcct gcccgcaggc 1200
 acggtggcaa gcattcatct gccctgggtg ctctgggtgg tgctgctggt cgtgtgcggc 1260
 ccccttgctc acaagaagct agtgaagaaa ttccgccaga agaagcagcg ccagtggatt 1320

ggcccaacgga gaatgaacca aaacatgtct ttccatcgca accacacggc aaccgtccga 1380
 tcccagctg agaacccac agcctccac gtggataacg aatacagcca acctccagg 1440
 aactcccgcc tgtcagctta tccagctctg gaaggggttc tgcacgctc ctccatgcag 1500
 cctgacaact cctccgacag tgactatgat ctgcatggg ctcagaggct gtaaagaact 1560
 gggatccatg agcaaaaaag cgagagccag acctgttgt cctgagaaaa ctgtccgctc 1620
 ttcacttgaa atcatgtccc tttttctacc ccggccagaa catggacaga ggccagaagc 1680
 ctcccggaac ggcgctgctg ccccgagtgg caggccagct cacactctgc tgcacaacag 1740
 ctggcgccg cctccacttg tggaaagctgt ggtgggcaga gccccaaaac aagcagcctt 1800
 ccaactagag actcgggggt gtctgaaggg gggccctttt ccctgccgcg tggggagcgg 1860
 cgtctcagtg aaatcggtt tctcctcaga ctctgtccct ggtaaggagt gacaaggaag 1920
 ctacagctg ggcgagtga ttttgaatag tttttgttaa gtagtgcttt tctccttcc 1980
 tgacaaatcg agcgttttg cctcttctgt gcagatcca cccctgcgga tccctctggg 2040
 gaggacagga aggggactcc cggagacctc tgcagccgtg gtggtcagag gctgctcatc 2100
 tgagcacaaa gacagctctg cacattcacc gcagctgcca gccaggggtc tgggtgggca 2160
 ccacctgac ccacagcgtc acccactcc ctctgtctta tgactccct ccccaacccc 2220
 ctcatctaaa gacaccttcc tttccactgg ctgtcaagcc cacagggcac cagtgccacc 2280
 caggggcctg cacaaagggg cgctagtaa accttaacca acttggtttt ttgcttcacc 2340
 cagcaattaa aagtcacaag ctgaggtagt ttcagtcct cacagttcat ctcttaaccc 2400
 aagagtcaga gatggggctg gtcattgtcc tttgtttga ataactccct tgacgaaaaac 2460
 agactcctct agtacttgga gatcttgac gtacacctaa tccatgggg cctcggttc 2520
 cttaactgca agtgagaaga ggaggtctac ccaggagcct cgggtctgat caagggagag 2580
 gccaggcgca gctcactcgg gcctctaaga aggtgaagca acatgggaac acatcctaag 2640
 acacatccta agacaggtcc tttctccacg ccatttgatg ctgtatctcc tgggagcaca 2700
 ggcatacatg gtccaagccg cataataagt ctggaagagc aaaagggagt tactaggata 2760
 tggggtgggc tgctcccaga atctgctcag cttttctgcc ccaccaacac cctccaacca 2820
 ggcttgctc tctgagagcc ccgtggcca agcccaggtc acagatcttc ccccgacct 2880
 gctgggaatc cagaacacag gacccattt gtcttccat atctggtgga ggtgagggg 2940
 ctctcaaaa gggaactgag aggtgctct tagggagggc aaaggttcg gggcagccag 3000
 tgtctccat cagtgccttt ttaataaaa gctcttccat ctatagtttg gccaccatac 3060
 agtggcctca aagcaacctt ggcctactta aaaaccaaac caaaaataaa gagtttagtt 3120

gaggagaaaa aaaaaaaaaa aaaaaaaaaa a

3151

<210> 2861

<211> 1653

<212> DNA

<213> Homo sapiens

<400> 2861

agcgatttca tcttcaggcc tggactacac cactcaccct ccagtggtgc ttgagaaaca 60
 aactgcaccc actgaactcc gcagctagca tccaaatcag cccttgagat ttgaggccctt 120
 ggagactcag gagttttgag agcaaaatga caacaccacag aaattcagta aatgggacttt 180
 tcccgccaga gccaatgaaa ggccttattg ctatgcaatc tgggtccaaa ccactcttca 240
 ggaggatgtc ttcactggtg ggcacccacgc aaagcttctt catgagggaa tctaagactt 300
 tgggggctgt ccagattatg aatgggctct tccacattgc cctggggggt cttctgatga 360
 tccagcagg gatctatgca cccatctgtg tgaactgtgt gtaccctctc tggggaggca 420
 ttatgtatat tatttcgga tcaactcctg cagcaacgga gaaaaactcc aggaagtgtt 480
 tgggtcaaag aaaaatgata atgaattcat tgagcctctt tgctgccatt tctggaatga 540
 ttctttcaat catggacata cttaatatta aaatttccca ttttttaaaa atggagagtc 600
 tgaattttat tagagctcac acaccatata ttaacatata caactgtgaa ccagctaate 660
 cctctgagaa aaactcccca tctacccaat actgttacag catacaatct ctgttcttgg 720
 gcattttgtc agtgatgctg atctttgcct tcttccagga acttgtaata gctggcatcg 780
 ttgagaatga atggaaaaga acgtgctcca gacccaaatc taacatagtt ctctgtcag 840
 cagaagaaaa aaaagaacag actattgaaa taaaagaaga agtggttggg ctaactgaaa 900
 catcttccca accaaagaat gaagaagaca ttgaaattat tccaatccaa gaagagggaag 960
 aagaagaac agagacgaac ttccagaac ctccccaaga tcaggaatcc tcaccaatag 1020
 aaaaatgacag ctctctctaa gtgatttctt ctgttttctg tttctttttt taaacattag 1080
 tgttcatagc ttccaagaga catgctgact ttcatttctt gaggtactct gcacatacgc 1140
 accacatctc tatctggcct ttgcatggag tgaccatagc tcttctctc ttacattgaa 1200
 tgtagagaat gtgaccattg tagcagcttg tgtgtgcacg ctctctcttt tgagcaactt 1260
 tcttacactg aagaaaggca gaatgagtgc ttcagaatgt gatttctctac taacctgttc 1320
 cttggatagg ctttttagta tagtatTTTT ttttgtcatt ttctccatca acaaccaggg 1380
 agactgcacc tgatggaaaa gatatatgac tgcttcatga cattcctaaa ctatcttttt 1440
 tttattccac atctacgttt ttgggtggagt cctctttgca tcattgtttt aaggatgata 1500
 aaaaaaaaaa aacaactagg gacaatacag aaccatttcc atttatcttt ctacagggct 1560

gacattgtgg cacattctta gagttaccac accccatgag ggaagctcta aatagccaac 1620
 acccatctgt tttttgtaaa aacagcatag ctt 1653

 <210> 2862
 <211> 2325
 <212> DNA
 <213> Homo sapiens

 <400> 2862
 ttttttaaag taagatgttt aagaaattaa acagtcttag ggagagttta tgactgtatt 60
 caaaaagtgt ttttaattag cttgttatcc cttcatgtga taactaatct caaatacttt 120
 ttcgatacct cagagcatta ttttcataat gagctgtgtt cacaatcttt ttagggttaac 180
 tcgtttttct tttgtcatta aggagaaaca ctttgatatt ctgatagagt ggccttcatt 240
 ttagtatttt tcaagaccac ttttcaacta ctacttttag gataagtttt aggtaaaaatg 300
 tgcataccta tcttgaatta tttcagttaa gcatgttagt tgggtggcata agagaaaact 360
 caatcagata gtgctgagac aggactgtgg agacacctta gaaggacaga ttctgttccg 420
 aatcacccgat gcgcgctcag caggactggc ctacgggagg ctctgggagg gtgggtgccca 480
 ggcccgccct gggctttggg tctccccga ctaccagag ctgggatgag tggtctctgc 540
 tgccggggcg actggtgtgt cagccccag ccttggttaat ggacttgag gaatgatcc 600
 atgccaaaag tttgcaaggc tcgcagtgc caggcgcccg acatgggagt gcatccgcc 660
 caaccctttt cccctctgtc tctgtgaga attccccgtc ggatacagag agcgtggccg 720
 ttggctgcct cgcacaggac ttcttcccg actccatcac tttctcctgg aaatacaaga 780
 acaactctga catcagcagc acccggggct tcccatcagt cctgagaggg ggcaagtacg 840
 cagccacctc acaggtgtgt ctgccttcca aggacgtcat gcagggcaca gacgaacacg 900
 tgggtgtgcaa agtccagcac cccaacggca acaaaagaaa gaactgtcct cttccagtga 960
 ttgccgagct gcctcccaaa gtgagcgtct tcgtccacc ccgcagcgc ttcttcggca 1020
 acccccgcaa gtccaagctc atctgccagg ccacggggtt cagtccccgg cagattcagg 1080
 tgtcctgggt gcgcgagggg aagcaggtgg ggtctggcgt caccacggac caggtgcagg 1140
 ctgaggcaaa ggagtctggg ccacagacct acaaggtgac cagcacactg accatcaaa 1200
 agagcgactg gctcagccag agcatgttca cctgccgggt ggatcacagg ggcctgacct 1260
 tccagcagaa tgcgtcctcc atgtgtgtcc ccgatcaaga cacagccatc cgggtcttcg 1320
 ccatccccc atcctttgac agcatcttcc tcaccaagtc caccaagttg acctgcctgg 1380
 tcacagacct gaccacctat gacagcgtga ccattctctg gaccgccag aatggccaag 1440
 ctgtgaaaac ccacaccaac atctccgaga gccaccccaa tgccacttcc agcgcctgg 1500

gtgaggccag catctgcgag gatgactgga attccgggga gaggttcacg tgcaccgtga 1560
 cccacacaga cctgccctcg ccactgaagc agaccatctc ccggcccaaa ggggtggccc 1620
 tgcacaggcc cgatgtctac ttgctgccac cagcccgga gcagctgaac ttgctggagt 1680
 cggccaccat cacgtgctg gtgacgggct tctctccgc ggacgtcttc gtgcagtga 1740
 tgcagagggg gcagcccttg tccccgaga agtatgtgac cagcgcacca atgcctgagc 1800
 cccaggcccc aggcgggtac ttgcgccaca gcctcctgac cgtgtccgaa gaggaatgga 1860
 acacggggga gacctacacc tgcgtggtgg cccatgaggc cctgcccaac aggggtaccg 1920
 agaggaccgt ggacaagtcc accgaggggg aggtgagcgc gcagcaggag ggctttgaga 1980
 acctgtgggc caccgcctcc accttcacg tctcttctct cctgagcctc ttctacagta 2040
 ccaccgtcac ctgtttcaag gtgaaatgat cccaacagaa gaacatcgga gaccagagag 2100
 aggaactcaa agggcgagc tccgggtctg gggctctgac tgcgtggcct gttggcacgt 2160
 gtttctcttc ccgcccgcg ctccagttgt gtgctctcac acaggcttcc ttctcgaccg 2220
 gcaggggctg gctggcttgc aggcacgagg tgggctctac cccactgcg tttgctgtgt 2280
 atacgcttgt tgcctgaaa taaatatgca cttttatcc atgaa 2325

<210> 2863

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2863

gacagccacg aagatcctac caaaatgaag cgcttctctt tctctctact caccatcagc 60
 ctcttggtta tggtagagat acaaaactgga ctctcaggac aaaacgacac cagccaaacc 120
 agcagccctc cagcatccag cagcatgagc ggaggcattt tctttttctt cgtggccaat 180
 gccataatcc acctctcttg ctccagttga ggtgacacgt ctacgcctta gccctgtgcc 240
 ccctgaacaa gctgccacca tcaactcgaa gagaatcccc tccatctttg ggaggggttg 300
 atgccagaca tcaccaggtt gtagaagttg acaggcagtg ccatgggggc aacagccaaa 360
 ataggggggt aatgatgtag gggccaagca gtgccagct gggggagaat aaagttacc 420
 ttgtactgca 430

<210> 2864

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 2864

cagctctctg tcagaatggc caccatggta ccctccgtgt tgtggccag ggcctgctgg 60
 actctgctgg tctgtgtct gtgacccca ggtgtccagg ggcaggagtt ccttttgcgg 120

gtggagcccc agaaccctgt gctctctgct ggagggtccc tgtttgtgaa ctgcagtact	180
gattgtccca gctctgagaa aatcgccctg gagacgtccc tatcaaagga.gctgggtggcc	240
agtggcatgg gctgggcagc cttcaatctc agcaacgtga ctggcaacag tcggatcctc	300
tgctcagtgt actgcaatgg ctcccagata acaggctcct ctaacatcac cgtgtacggg	360
ctcccggagc gtgtggagct ggcacccctg cctccttggc agccgggtgg ccagaacttc	420
accctgcgct gccaaagtga ggggtgggtcg ccccggacca gcctcacggt ggtgtgctt	480
cgctgggagg aggagctgag ccggcagccc gcagtggagg agccagcggg ggtcactgcc	540
actgtgctgg ccagcagaga cgaccacgga gccctttct catgccgcac agaactggac	600
atgcagcccc aggggctggg actgttcgtg aacacctcag ccccccgca gctccgaacc	660
tttgtctcgc cgtgacccc ccgcgcctc gtggccccc ggttcttgga ggtggaaacg	720
tcgtggccgg tggactgcac cctagacggg ctttttcag cctcagaggc ccaggtctac	780
ctggcgctgg gggaccagat gctgaatcgc acagtcatga accacgggga cacgctaacg	840
gccacagcca cagccacggc gcgcgcggat caggagggtg cccgggagat cgtctgcaac	900
gtgaccctag gggcgagag acggggaggcc cgggagaact tgacggtctt tagcttccta	960
ggacccattg tgaacctcag cgagcccacc gcccatgagg ggtccacagt gaccgtgagt	1020
tgcatggctg gggctcgagt ccaggtcacg ctggacggag ttccggccgc gggcccgggg	1080
cagccagctc aacttcagct aaatgctacc gagagtacg acggacgcag cttctctctgc	1140
agtccactc tcgagggtga cggcgagttc ttgcacagga acagtacgt ccagctgcga	1200
gtcctgtatg gtcccaaat tgaccgagcc acatgcccc agcacttgaa atggaaagat	1260
aaaacgagac acgtctcgca gtgccaagcc aggggcaacc cgtaccccg gctgcggtgt	1320
ttgaaggaag gctccagccg ggagggtgcc gtggggatcc cgttctctgt caacgtaaca	1380
cataatggta cttatcagtg ccaagcgtcc agctcacgag gcaataacac cctggtcgtg	1440
gtgatggaca ttgaggctgg gagctccac ttgtccccg tcttcgtggc ggtgttactg	1500
accctgggcg tggtgactat cgtactggcc ttaatgtacg tcttcaggga gcaccaacgg	1560
agcggcagtt accatgttag ggaggagagc acctatctgc cctcagctc tatgcagccg	1620
acagaagcaa tgggggaaga accgtccaga gctgagtac gctgggatcc gggatcaaa	1680
ttggcggggg cttggctgtg ccctcagatt ccgcaccaat aaagccttca aactccctaa	1740
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	1800
aaaaaaaaa aaaaaaaaaa aaaa	1824

<210> 2865

<211> 4882
 <212> DNA
 <213> Homo sapiens

<400> 2865
 agaggaggaa attgttctc gtctgataag acaacagtgg agaaaggacg catgctgttt 60
 cttagggaca cggtgactt ccagatatga ccatgtattt gtggcttaaa ctcttggcat 120
 ttggctttgc ctttctggac acagaagtat ttgtgacagg gcaaagccca acaccttccc 180
 ccactggatt gactacagca aagatgccca gtgttccact ttcaagtac cccttaceta 240
 ctcacaccac tgcattctca ccgcgaagca cctttgaaag agaaaatgac ttctcagaga 300
 ccacaacttc tcttagtcca gacaatactt ccaccaagt atccccggac tctttggata 360
 atgctagtgc ttttaatacc acaggtgttt catcagtaca gacgcctcac ctccccacgc 420
 acgcagactc gcagacgcc tctgtggaa ctgacacgca gacattcagc ggctccgccg 480
 ccaatgcaaa actcaaccct accccaggca gcaatgctat ctcagatgcc taccttaatg 540
 cctctgaaac aaccactctg agcccttctg gaagcgctgt catttcaacc acaacaatag 600
 ctactactcc atctaagcca acatgtgatg aaaaatatgc aaacatcact gtggattact 660
 tataatacaa ggaaactaaa ttatttacag caaagctaaa tgtaatatgag aatgtggaat 720
 gtggaaacaa tacttgcaca aacaatgagg tgcataacct tacagaatgt aaaaatgcgt 780
 ctgtttccat atctcataat tcatgtactg ctctgataa gacattaata ttagatgtgc 840
 caccagggtg tgaaaagttt cagttacatg attgtacaca agttgaaaaa gcagatacta 900
 ctatttgttt aaaatggaaa aatattgaaa cctttacttg tgatacacag aatattacct 960
 acagatttca gtgtggtaat atgatatttg ataataaaga aattaatta gaaaaccttg 1020
 aaccgaaca tgagtataag tgtgactcag aaatactcta taataaccac aagtttacta 1080
 acgcaagtaa aattattaaa acagattttg ggagtcagg agagcctcag attatttttt 1140
 gtagaagtga agctgcacat caaggagtaa ttacctgaa tccccctcaa agatcatttc 1200
 ataattttac cctctgttat ataaaagaga cagaaaaaga ttgcctcaat ctggataaaa 1260
 acctgatcaa atatgatttg caaaatttaa aaccttatac gaaatatgtt ttatcattac 1320
 atgcctacat cattgcaaaa gtgcaacgta atggaagtc tgcaatgtgt catttcacaa 1380
 ctaaaagtgc tctccaagc cagggtctgga acatgatgt ctccatgaca tcagataata 1440
 gtatgcattg caagtgtagg cctcccagg accgtaatgg ccccatgaa cgttaccatt 1500
 tggaaagtga agctggaaat actctgggta gaaatgagtc gcataagaat tgcgatttcc 1560
 gtgtaaaaga tcttcaatat tcaacagact acacttttaa ggctatttt cacaatggag 1620
 actatcctgg agaacccttt attttacatc attcaacatc ttataattct aaggcactga 1680

tagcatttct	ggcatttctg	attattgtga	catcaatagc	cctgcttggt	gttctctaca	1740
aaatctatga	tctacataag	aaaagatcct	gcaattttaga	tgaacagcag	gagcttggtg	1800
aaagggatga	tgaaaaacaa	ctgatgaatg	tggagccaat	ccatgcagat	attttgttgg	1860
aaacttataa	gaggaagatt	gctgatgaag	gaagactttt	tctggctgaa	tttcagagca	1920
tcccgcgggt	gttcagcaag	tttctataa	aggaagctcg	aaagcccttt	aaccagaata	1980
aaaaccgtta	tggtgacatt	cttccttatg	attataaccg	tggtgaactc	tctgagataa	2040
acggagatgc	agggctcaaac	tacataaatg	ccagctatat	tgatggttcc	aaagaaccca	2100
ggaaatacat	tgctgcacaa	gggtccaggg	atgaaactgt	tgatgatttc	tggaggatga	2160
tttgggaaca	gaaagccaca	gttattgtca	tggtcactcg	atgtgaagaa	ggaacagga	2220
acaagtgtgc	agaatactgg	ccgtcaatgg	aagagggcac	tcgggctttt	ggagatgttg	2280
ttgtaaagat	caaccagcac	aaaagatgtc	cagattacat	cattcagaaa	ttgaacattg	2340
taataaaaaa	agaaaaagca	actggaagag	aggtgactca	cattcagttc	accagctggc	2400
cagaccacgg	gggtcctgag	gatcctcact	tgctcctcaa	actgagaagg	agagtgaatg	2460
ccttcagcaa	tttcttcagt	gggtccattg	tggtgcactg	cagtgtctgt	gttgggcgca	2520
caggaaccta	tatcggaatt	gatgccatgc	tagaaggcct	ggaagccgag	aacaaagtgg	2580
atgtttatgg	ttatgttgtc	aagctaaggc	gacagagatg	cctgatggtt	caagtagagg	2640
cccagttacat	cttgatccat	caggcttttg	tggaatacaa	tcagtttgga	gaaacagaag	2700
tgaatttgtc	tgaattacat	ccatatctac	ataacatgaa	gaaaagggat	ccacccagtg	2760
agccgtctcc	actagagggt	gaattccaga	gacttccttc	atataggagc	tggaggacac	2820
agcaccattg	aatcaagaa	gaaaaataaa	gtaaaaacag	gaattcctaat	gtcatcccat	2880
atgactataa	cagagtgcga	cttaaacatg	agctggaaat	gagtaaagag	agtgcagcatg	2940
attcagatga	atcctctgat	gatgacagtg	attcagagga	accaagcaaa	tacatcaatg	3000
catcttttat	aatgagctac	tggaaacctg	aagtgatgat	tgctgtctcag	ggaccactga	3060
aggagaccat	tggtgacttt	tggcagatga	tcttccaaag	aaaagtcaaa	gttattgtta	3120
tgctgcagaga	actgaacaat	ggagaccagg	aaatctgtgc	tcagtactgg	ggagaaggaa	3180
agcaaacata	tggagatatt	gaagttgacc	tgaagagcac	agacaaatct	tcaacttata	3240
cccttcgtgt	ctttgaactg	agacattcca	agaggaaaga	ctctcgaaact	gtgtaccagt	3300
accaatatac	aaactggagt	gtggagcagc	ttcctgcaga	acccaaggaa	ttaattctcta	3360
tgattcaggt	cgctcaacaa	aaacttcccc	agaagaattc	ctctgaaggg	aacaagcatc	3420
acaagagtac	acctctactc	attcactgca	gggatggatc	tcagcaaacg	ggaatatttt	3480
gtgctttgtt	aaatctctta	gaaagtgcgg	aaacagaaga	ggtagtggtt	atttttcaag	3540

```

tggtaaaagc tctacgcaaa gctaggccag gcatgggttc cacattcgag caatatcaat 3600
tcctatatga cgtcattgcc agcacctacc ctgctcagaa tggacaagta aagaaaaaca 3660
accatcaaga agataaaatt gaatttgata atgaagtggg caaagtaaaag caggatgcta 3720
attgtgttaa tccacttggt gccccagaaa agctccctga agcaaagga caggctgaag 3780
gttctgaacc cagcagtgcc actgaggggc cagaacattc tgtcaatggc cctgcaagtc 3840
cagcttttaa tcaaggttca taggaaaaga cataaatgag gaaactccaa acctcctggt 3900
agctgttatt tctatttttg tagaagtagg aagtgaaaaat aggtatacag tggattaatt 3960
aatgcgcgcg aaccaatatt tgtagaaggg ttatatttta ctactgtgga aaaatattta 4020
agatagtttt gccagaacag ttgtacaga cgtatgctta ttttaaaatt ttatctctta 4080
ttcagtaaaa aacaacttct ttgtaatcgt tatgtgtgta tatgtatgtg tgtatgggtg 4140
tgtgtttgtg tgagagacag agaaagagag agaattcttt caagtgaatc taaaagcttt 4200
tgcttttctt ttgtttttat gaagaaaaaa tacattttat attagaagtg ttaacttagc 4260
ttgaaggatc tgttttttaa aatcataaac tgtgtgcaga ctcaataaaa tcatgtacat 4320
ttctgaaatg acctcaagat gtctctcttg ttctactcat atatatctat cttatatact 4380
tactatttta cttctagaga tagtacataa aggtgggtatg tgtgtgtatg ctactacaaa 4440
aaagtgtgta actaaattaa cattgggaaa tcttatattc catatattag catttagtcc 4500
aatgtctttt taagcttatt taattaaaaa atttccagtg agcttatcat gctgtcttta 4560
catgggggtt tcaattttgc atgctcgatt attccttgta caatatttaa aatttattgc 4620
ttgatacttt tgacaacaaa ttagggtttg tacaattgaa cttaaataaa tgcattaaaa 4680
ataaataaat gcaatatgta ttaatatcca ttgtataaaa atagaagaat acaaacatat 4740
ttgttaataa ttacatatg aaatttaata tagctatttt tatggaattt ttcattgata 4800
tgaaaaatat gatattgcat atgcatagtt cccatgtaa atccattca taactttcat 4860
taaagcattt accttgaatt tc 4882

```

<210> 2866

<211> 1702

<212> DNA

<213> Homo sapiens

<400> 2866

```

agactcaaca agagctccag caaagacttt cactgtagct tgacttgacc tgagattaac 60
tagggaatct tgagaataaa gatgagctct gaaaattggt tcgtagcaga gaacagctct 120
ttgcatccgg agagtggaga agaaaatgat gccaccagtc cccatttctc aacacgtcat 180
gaagggtcct tccaagttcc tgcctgtgtg gctgtaatga atgtggctct catcaccatt 240

```

ttaatcatag ctctcattgc cttatcagtg ggccaataca attgtccagg ccaatacaca 300
 ttctcaatgc catcagacag ccatgtttct tcatgctctg aggactgggt tggtaccag 360
 aggaaatgct actttatttc tactgtgaag aggagctgga cttcagccca aaatgcttgt 420
 tctgaacatg gtgctactct tgctgtcatt gattctgaaa aggacatgaa ctttctaaaa 480
 cgatacgcag gttagagagga aactggggtt ggactgaaaa aggaacctgg tcacccatgg 540
 aagtgggtcaa atggcaaaaga atttaacaac tgggtcaacg ttacagggtc tgacaagtgt 600
 gtttttctga aaaacacaga ggctcagcagc atggaatgtg agaagaattt atactggata 660
 tgtaacaacac cttacaataa ataaggaaac atgttcactt attgactatt atagaatgga 720
 actcaaggaa atctgtgtca gtggatgctg ctctgtgggt cgaagcttc catagagact 780
 ttgtgaaaaa aaattttata gtgtcttggg aattttcttc caaacagaa tatggaaaaa 840
 aaggaaagaaa ttccaggaaa atctgcactg tgggctttta ttgcatgag ctagaagcat 900
 cacagggtga ccaataacca tgcccaagaa tgagaagaat gactatgcaa cctttggatg 960
 cactttatat tattttgaat ccagaaataa tgaaataact aggcgtggac ttactattta 1020
 ttgtgtaatg actaccaaca gtgagagccc ttcatgcatt tgcactactg gaaggagtta 1080
 gatgttggtg ctgatactg aatgtaaaac aaggaattat ggctggtaac ataggttttt 1140
 agtctaattg aatcccttaa actcaggag catttataaa tggacaaatg cttatgaaac 1200
 taagatttgt aatatttttc tctttttaga gaaatttgc aatttacttt gttatttttc 1260
 cccaaaaaga atgggatgat cgtgtattta ttttttact tctcagctg tagacaggtc 1320
 cttttcgatg gtacatatatt ctttgccttt ataattcttt atacagtgtc ttacagagaa 1380
 aagacataag caaagactat gaggaatatt tgcaagacat agaatagtgt tggaaaatgt 1440
 gcaatatgtg atgtggcaaa tctctattag gaaatattct gtaatcttca gacctagaat 1500
 aatactagtc ttataatagg tttgtgactt tcctaaatca attctattac gtgcaatact 1560
 tcaatacttc atttaaaata tttttatgtg caataaaatg tatttgtttg tattttgtgt 1620
 tcagtacaat tataagctgt ttttatatat gtgaaataaa agtagaataa acacaaaaaa 1680
 aaaaaaaaaa aaaaaaaaaa aa 1702

<210> 2867

<211> 563

<212> DNA

<213> Homo sapiens

<400> 2867

tgaagagtgg aagagacatt ccagaggagg attgccttcg tcagggttaac ggggtgggct 60

gctcagggtgc cctacccttc acccccttct gtatcagatt ggacctccca ctcccatctc 120

actctgctg tacaatcttc catatccgca agttcactgg cactcttctg gcacctgggc 180
 aagatcccag aacagaggat ggagtgactg gcctcacaga gcttagtgcc cgactcaggg 240
 gaaatgggac tgggtgcatg gaaatgggca gcctaggata ggacacgaga gtctgaaatt 300
 caaagcaacc agcttgaagt ggtttgagaa gctggaagca aacatgggct agagagatag 360
 ggcagaagtc aagacgagga tctggactga tgtggagaca agtagccacg gaagcatgaa 420
 ctgtatcctg cacaagatcc ctcttccccg cctcctaatt cattatgcc aaaagtgcct 480
 acgtgaatt ccagcccaga gtactcatga ctgagagac gtggacggag ccagcttcta 540
 ccttgcttgg acgtctctcc cct 563

<210> 2868

<211> 822

<212> DNA

<213> Homo sapiens

<400> 2868

gatcctcttt cctcttctcc caccctcatt ataggctgcg aagcctctct tctgcacctg 60
 ataacaaaac gtcatatgag aagcatggta gatccttagc atcaaaggtt gaggactctt 120
 attctgatta taagtagtgg ctcttgacta caatcaagtc tcaaataata gtgtaagaga 180
 ataaagcaga ataataagac taagttaaca gtttaggctt ctttggaaac atgctgggctt 240
 agatgaaaaa cccaacactg tcctttacta gctaagtgc cttgagcaac tgattacacc 300
 ctttgatgcc tcagttttct cctctgtgtt gtggggtaat agtaatatct acttctctggg 360
 gttgttcctg aagattaatt aacaattata ctgtcacaag ctttagcaca gtgccctgta 420
 tgttatttcc ttggccaaac tttcttactc tgccatttgt tcaatgtcct aatgagcatg 480
 aacactacat taggtatcat gcagaacact ctaaagataa gtattatgat ctctatttca 540
 cagataagga aatttaaat gggagaggct aaagggtcga cttgcccaag gtcacttgaa 600
 actaatatgc cagcagagac agaattagga gccaaagata tttaagagcc aagtgtattg 660
 aacctaaaat ctgggctcct aaataccaag cttcactggc tctctggtcc cagtgcaggt 720
 tgggtgctaaa aagtattccg gaatgaaaag ttctcttcca gagaccctgg ccttccaaaag 780
 cggtcacctg ataggggaagt cttacggcta ggaagttaca aa 822

<210> 2869

<211> 1182

<212> DNA

<213> Homo sapiens

<400> 2869

gaattccgct agactaagtt ggtcatgatg cagaagctac tcaaatgcag tcgcttctg 60

ctggctcttg cccctcatcct ggttctggaa tctcagttc aaggttatcc tacgcagaga 120
 gccaggtagc aatgggtgag ctgcaatcca gacagtaatt ctgcaaaactg ccttgaagaa 180
 aaaggaccaa tgttcgaact acttccagggt gaatccaaca agatcccccg tctgaggact 240
 gaccttttct caaagacgag aatccaggac ttgaatcgta tcttcccact tcttgaggac 300
 tactctggat caggcttcgg ctccggctcc ggctctggat caggatctgg gagtggcttc 360
 ctaacggaaa tggaacagga ttaccaacta gtagacgaaa gtgatgcttt ccatgacaac 420
 cttaggctct ttgacaggaa tctgccctca gacagccagg acttgggtca acatggatta 480
 gaagaggatt ttatgttata aaagaggatt tccccacctt gacaccaggc aatgtagtta 540
 gcatatttta tgtaccatgg ttatatgatt aatcttggga caaagaattt tatagaaatt 600
 tttaaacatc tgaaaaagaa gcttaagttt tatcatcctt ttttttctca tgaattctta 660
 aaggattatg ctttaatgct gttatctatc ttattgttct tgaataatcc tgcatttttt 720
 gggtatcatg tcaaccaaca tcattatgaa attaattaga ttcccatggc cataaaatgg 780
 ctttaagaa tatatatata tttttaaggt agcttgagaa gcaaatggc aggtaatat 840
 tcatacctaa attaagactc tgacttggat tgtgaattat aatgatatgc cctttttctt 900
 ataaaaacaa aaaaaaata atgaaacaca gtgaatttgt agagtggggg tatttgacat 960
 attttacagg gtggagtgtg ctatatacta ttaccttga atgtgtttgc agagctagtg 1020
 gatgtgtttg tctacaagta tgattgctgt tacataacac cccaaattaa ctcccaaat 1080
 aaaacacagt tgtgctgtca atacctcata ctgctttacc ttttttctct ggatatctgt 1140
 gtattttcaa atgttactat atattaaagc agaaatataa cc 1182

<210> 2870

<211> 537

<212> DNA

<213> Homo sapiens

<400> 2870

tttttttttt tttttttttt tctttaaaca cacttcattt ttttttaaag agttattaca 60
 tccacacacg gttcaaaaaa caaattatga aaggatatata gtaagacta gctgttcaaa 120
 acaaagcag cctttcacga ttatgtgagg gaacaaaggg caacaccctt attagtgcga 180
 gtttaaaacc ttccttcaca ccttgagctc tgccttatgt gcgtcctggg tgattttaac 240
 ctacatccta acatttaggc cagtttcctt tcatcctctt tacaatatata aaatctctta 300
 cccttctcta atattatttg gcattccaaa ataaggaagt gtcattggta aaaccaaacc 360
 aaaggcaatt ctgactgtgc acagctcagc ctcaccccaa cctcagaacc actggatcag 420
 accaggtttt agtttttttg tacatttact tgataactaa gacacaattt gcctacagtg 480

aaatgcttag ttctgacacg tatcgctcaa tccactgtca agaattcata acaaagt 537

<210> 2871
 <211> 503
 <212> DNA
 <213> Homo sapiens

<400> 2871
 ttttttttta gtataagcat atcccatgca atttttggaa catatactga aaaattatac 60
 tgaaagctca atcaaaactga tctggcaacc ctatctagtt acctacaac taccgtgttc 120
 ccataaaggc ttaagtaatt ttggaatccg ttaacacatt tagcttatctc tttccccatt 180
 ggttccctgg gcttagagca gacagcaagc ctttctttca cttggccaag aaggcacctc 240
 cttttcccat ctaacaggtt gggatcacag ctagtgtgtg gcaaagcagt ccacatgcac 300
 gttgtttatc tttttaagga tatgggcata gtttccaccc ctccctacct ctccgtactc 360
 accatctcta agccttccca cacaggccct gctgcagccg ccggagaact gaccgtgctt 420
 gtgggtccac tcctctctcc cacatcttcc ttaagcctca atccatccca gttcatccat 480
 gccctttcca aagtcctgtg att 503

<210> 2872
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 2872
 tttttttttc caataaaacc actgcagatc taaaatactc tcttggttta aaccacacaa 60
 aaagcaattt aataggcaca atcctacagg ttttctgaga gaaataagga agagatcaag 120
 tgtaagctac gtaaaattca cgttttgcac cttataaagc aaacttcaat gttgttaaat 180
 aaccagtaga aaatatctac aaaaatcaaa ctaaacacct gttcttataa gcagcagtc 240
 tctattttct ctctaaacca tatattccca actcagaccc tctctgtgac ccactgttcc 300
 caaagcatag agtctgaaga agaataataa aacatttcgg acattcgttc acaaaaccaa 360
 attagacctt tccacaaagt acaggagata aaacagaac acttccattt tatctaattt 420
 atggcaaata gttcaaggaa tgcctatt 448

<210> 2873
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2873
 tttttcttgg tcactctacct ttaatgtttg gtcttaagtc ttataaacac atatcattta 60
 atataaaaaa aaaaggatgc tcacctgacc ctttcagatg ttaaacgatt cgtcttcttc 120

ctcgggggatg ctttttctga aggatgctgg cctggggaaa acagaaccgg aagggttaaca	180
ctcgccatac ctaataaaac caatgagaaa tacgaggccc cgagatggag tttctgggag	240
attcctgaag agcacgctgt ggcgattgag atgatgacgc gtggagctgc cccctccct	300
gtctccaca tcagggaacct gtccctctac aggaggaatt ctactcctga ggccaccgtc	360
ccctgtcact cagggtggcct gcattgcacag cacttctggc tctgaaagcg tcacctcatg	420
gctgtttctg cttcttctgt ggtgaattt	449

<210> 2874

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 2874

agactccctg tctttgcggt ttgggagatg atgagaaacc acagaattgc tagtagttta	60
tgtaggagtc aggtcttctc caagaaaaaa aaaaagaaaa aaaaaacaa catggctgca	120
aaggagaaac tggaggcagt gttaaatgtg gccctgaggg tgccaagcat catgctgttg	180
gatgtcctgt acagatggga gtgcagctcc tttttccagc agatccaagc aagtagcctt	240
agtaataacc ctcttttcca gtataagtat ttggctctta atatgcatta ttaggtttat	300
atcttaagtg tgggtgctgt aacattgccc aggcagcacc tggttcagct ttatctatat	360
tttttgactg ctctgtcctc ctatgtctga catcaaatc ccagggacta tgttcggagt	420
gaactggagt ttgcctatga gggaccaatg tatttagaac ctctctctat gaatcggttt	480
accacagcct taataggtca gttgggtgtg tgtactttat gctcctgtgt catgaaaaca	540
aagcagattt ggctgttttc agctcacatg ctctcctcgc tagcacgact ctgccttggt	600
cctttggaga caattgttat catcaataaa ttgctatga tttttactgg attggaagtt	660
ctctattttc ttgggtctaa tcttttggtg ccttataacc ttgctaaac tgcatacaga	720
gaattgggtc aggtagtggg ggtatatggc ctctcgcctc tgggaatgac cctgtggaat	780
caactggtag tccctgttct ttctcatggt ttctggctcg tcttatttgc tcttcagatt	840
tactctatt tcagtactcg agatcagcct gcatacgtg agaggcttct tttccttttt	900
ctgacaagta ttgcggaatg ctgcagcact ccttactctc ttttgggttt ggtcttcacg	960
gtttcttttg ttgccttggg tgttctcaca ctctgcaagt tttacttgca gggttatcga	1020
gctttcatga atgatcctgc catgaatcgg ggcatacagc aaggagtaac gctgttaate	1080
ctggcagtcg agactgggct gatagaactg caggttggtc atcgggcatt cttgctcagt	1140
attatccttt tcattgtcgt agcttctatc ctacagtcta tggtagaaat tgcagatcct	1200
attgttttgg cactgggagc atctagagac aagagcttgt ggaaacactt ccgtgctgta	1260

agcctttgtt tatttttatt ggtattccct gcttatatgg cttatatgat ttgccagttt 1320
 ttccacatgg attttttggt tcttatcatt atttccagca gcattcttac ctctcttcag 1380
 gttctgggaa cactttttat ttatgtctta ttatgggtg aggaattcag aaaagagcca 1440
 gtggaaaaca tggatgatgt catctactat gtgaatggca cttaccgcct gctggagttt 1500
 cttgtggccc tctgtgtggt ggcctatggc gtctcagaga ccatcttttg agaatggaca 1560
 gtgatgggct caatgatcat ctctattcat tctactata acgtgtggct tcggggccag 1620
 ctgggggtga agagctttct tctccgcagg gatgctgtga ataagattaa atcgttaccc 1680
 attgctaca aagagcagct tgagaaacac aatgatattt gtgccatctg ttatcaggac 1740
 atgaaatctg ctgtgatcac gccttgagct cattttttcc atgcaggctg tcttaagaaa 1800
 tggctgtatg tccaggagac ctgccctctg tgccactgcc atctgaaaaa ctctctccag 1860
 cttccaggat taggaactga gccagttcta cagcctcatg ctggagctga gcaaacgctc 1920
 atgtttcagg aaggtagtga acccccaggc caggagcata ctccagggac caggatacag 1980
 gaaggttcca gggacaataa tgagtacatt gccagacgac cagataacca ggaaggggct 2040
 tttgaccca aagaatatcc tcacagtgcg aaagatgaag cacatctgtg tgaatcagcc 2100
 tagaggagaa gcagcaggaa tgatgctttg atactctgga ggagaagta actcaagatg 2160
 gaattcatgt tctgatttga ggaatgaaaa tgagatgac aggcaggaaa ctgacattcc 2220
 aaggatctaa tccaggaagt actctcagtg gggaccacct gctttcatcc cctgacattg 2280
 tgggagaaat tttgcaatgt atgctaataa aaatgtattt atatgttctc tgctgatgtt 2340
 ttatagaggt ttgtgaagaa aattcaacct cagcaacttc agaaactgcc cctgatacgt 2400
 gtgagagaga aataaaatca gattttgagt gttgaaggga ctgaggaagt gaggataaag 2460
 agcatgagga cagcatggaa agaaggaggc agaagtggaa ctgaactttc actctccatg 2520
 ggacagatca atctcattat caagtctgaa tagcaaccag cctctctctc cacccegttt 2580
 ctctcagtt aattggagct cagtcagggt attattgagt cttgtacagc actgaaatga 2640
 aatcaaaagt gaagaagcat tgattgtatt cgaagattga agcacgctca tactttgtat 2700
 gtgcttttag gaaggggtg gtgggcactt gggccttgcg ggtgcattca tgtaactgta 2760
 gactcttgaa ctttatgacg gagtcttcaa tttttgatg tatatgaac tttgtttaa 2820
 tatgtgtat acttcgctg ctgtgtgaag taaactaaa ctctgatgaa cactttggag 2880
 tctgctttag tgaaggagac caaagtggga agggctttag ggcactgata gaggccctg 2940
 gtgtactttt caatcctgtg taatgtttaa ttcttgcaac tgaatcaaaa cagtgtttaa 3000
 ttatggcaat atttgcaact tgggaatgag tacataactg tatgatcaca ctctgcaaat 3060
 gccactttta aagctgttaa tagactttgc accttttctt tgacaaggat gtgtcatatt 3120

taaattttta cattcatcat ggctacaggt agaactgggg aggggggaat gtaatttttt	3180
atgggaattt tgatatgaaa agaaactagt cttttattta tacaataggc ttggctcaaa	3240
aagtgttttt cagacctcgg tattcctaata gtgggatgtg actttatttt atttttagta	3300
gcaaatttgg atgtagactg acagacatag ctgaatgtct taataaattt aaatttgaag	3360
at	3362

<210> 2875

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2875

ttttctgttt catcattaca aatagactca tagctcttta atttttccat ttaacacttt	60
aattttccat aggcctagat tttcaagaag tccaatatct ctccacttgaa gtgtcttttc	120
cctggagtag attgggagat ttgagggata tctgtccaaa gatgagacag tctgtttcta	180
gtttcccatc cagcctgatg gggcgctctac agttgttacc acaaggtgtc gctgttgaac	240
agattctggt gcagtctagt gcatagctgt ccacttctag agtgatcact tgctgggcca	300
agttcctctc cttaagtgt gtctcacatt aaggttccca aattacagac tcattaattc	360
accctaataa gctcatccag gcagtttagg tcttcagggg ctccagcct ccaacacaca	420
ttgggcaaaa accagcctgt accaccagct ccaagccctg tgttgaatct aggtcattgg	480
tccagatgcc ccttcattct gggcctgtgg tgcctttcc agacagcaga cctcagttaa	540
gggcatccca gtccatcaga gaagttccag gatcacagac cctcaaaagg g	591

<210> 2876

<211> 1437

<212> DNA

<213> Homo sapiens

<400> 2876

gcttctctag acatgcccgt gctgctactg ctgcccctgc tgtgggcagg gcccctggct	60
atggatccaa atttctggct gcaagtgcag gactcagtga cggtaacagga ggggtttgtg	120
gtcctcgtgc cctgcacttt ctccatccc ataccctact acgacaagaa ctccccagtt	180
catggttact ggttcgggga aggagccatt atatccgggg actctccagt ggcacaaaac	240
aagctagatc aagaagtaca ggaggagact cagggcagat tccgctcct tggggatccc	300
agtaggaaca actgctccct gacatcgta gacgccagga ggagggataa tggttcatac	360
ttctttcggg tggagagagg aagtacaaa tacagttaca aatctccca gctctctgtg	420
catgtgacag acttgaccca caggccaaa atcctcatcc ctggcactct agaaccgggc	480

cactccaaaa accttacctg ctctgtgtcc tgggcctgtg agcaggggaac acccccgatc 540
 ttctctcgtg tgtcagctgc cccacacctc ctgggcccga ggactactca ctctcgtgtg 600
 ctcataatca ccccacggcc ccaggaccac ggcaccaacc tgacctgtca ggtgaagtgc 660
 gctggagctg gtgtgactac ggagagaacc atccagctca acgtcaccta tgttccacag 720
 aacccaacaa ctggatatct tccaggagat ggctcaggga aacaagagac cagagcagga 780
 ctggttcatg gggccatttg aggagctggt gttacagccc tgctcgctct tgtctctctc 840
 ctcatcttct tcatagttaa gaccacacag aggaagcag ccaggacagc agtgggcagc 900
 aatgacaccc accctaccac agggctcagcc tccccgaaac accagaagaa ctccaagtta 960
 catggcccca ctgaacctc aagctgttca ggtgccgccc ctactgtgga gatggatgag 1020
 gagctgcatt atgcttccct caactttcat gggatgaate cttccaagga cacctccacc 1080
 gaatactcag aggtcaggac ccagttagga accctcaaga gcatcaggct cagctagaag 1140
 atccacatcc tctacaggtc ggggacaaaa ggctgattct tggagattta actccccaca 1200
 ggcaatgggt ttagagacat tatgtgagtt tctgtctata ttaacatcat cttgagactt 1260
 tgcaagcaga gagtcgtgga atcaaatctg tgctctttca ttgtctaagt gtatgatgtc 1320
 acacaagctc cttaaccttc catgtctcca tttctcttct tgtgaagtag gtataagaag 1380
 tcttatctca tagggatgct gtgagcatta aataaaggta cacatggaaa acaccag 1437

<210> 2877

<211> 1182

<212> DNA

<213> Homo sapiens

<400> 2877

tagttctccc tgagtgaac ttgcctgctt ctctggcccc tggctctgtc ctgttcteca 60
 gcatggtgtg tctgaagctc cctggaggct cctgcatgac agcgtgaca gtgacactga 120
 tgggtgctgag ctccccactg gctttggtg gggacacccg accacgtttc ttgtggcagc 180
 ttaagtttga atgtcatctt ttcaatggga cggagcgggt gcggttgctg gaaagatgca 240
 tctataacca agaggagtcc gtgcgcttcg acagcgacgt gggggagtac cgggcggtga 300
 cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc ctggagcaga 360
 ggcggggcgc ggtggacacc tactgcagac acaactacgg ggttggtgag agcttcacag 420
 tgacgcggcg agttgagcct aaggtgactg tgtatcttcc aaagaccag cccctgcagc 480
 accacaacct cctggtctgc tetgtgagtg gtttctatcc aggcagcatt gaagtcaggt 540
 ggttcgggaa cggccaggaa gagaaggctg ggggtggtgc cacaggcctg atccagaatg 600
 gagattggac cttccagacc ctggtgatgc tggaaacagt tctcggaggt ggagaggttt 660

acacctgccac agtggagcac ccaagtgtga cgagccctct cacagtggaa tggagagcac	720
ggtctgaatc tgcacagagc aagatgctga gtggagtcgg gggcttcgtg ctgggcctgc	780
tcttctctgg ggccgggctg ttcctctact tcaggaatca gaaaggacac tctggacttc	840
agccaacagg attcctgagc tgaatgcag atgaccacat tcaaggaaaga acctctctgtc	900
ccagctttgc agaataaaaa gctttctctgc ttggcagtta tcttccaca agagagggct	960
ttctcaggac ctggttgccta ctggttcggc aactgcagaa aatgtcctcc cttgtggctt	1020
cctcagctcc tgccttggc ctgaagtccc agcattgatg acagcgctcc atcttcaact	1080
tttgtgtccc cctttgccta aaccgtatgg cctcccgctg atctgtactc acctgtacg	1140
acaaacacat tacattatta aatgtttctc aaagatggag tt	1182

<210> 2878

<211> 2412

<212> DNA

<213> Homo sapiens

<400> 2878

agtcccatgg ggaatgtcaa caggcagggg cagcactgca gagatttcat catggtctcc	60
caggccctca ggctcctctg ccttctgctt gggcttcagg gctgcctggc tgcagtcttc	120
gtaaccacagg aggaagccca cggcgctcctg caccggcgcc ggcgcgccaa cgcgttctctg	180
gaggagctgc ggccgggctc cctggagagg gattgcaagg aggagcagtg ctccctcgag	240
gaggcccggg agatcttcaa ggacgcggag aggacgaagc tgttctggat tctttacagt	300
gatggggacc agtgtgcctc aagtccatgc cagaatgggg gctcctgcaa ggaccagctc	360
cagtcctata tctgcttctg cctccctgcc ttcgagggcc ggaactgtga gacgcacaag	420
gatgaccagc tgatctgtgt gaacgagaac ggcggtctgt agcagtactg cagtgaccac	480
acgggcacca agcgcctcctg tcggtgccac gaggggtact ctctgctggc agacggggtg	540
tcctgcacac ccacagttga atatccatgt ggaaaaatac ctattctaga aaaaagaaat	600
gccagcaaac ccaaggccg aattgtgggg ggcaagggtg gccccaaagg ggagtgtcca	660
tggcaggctc tgttgttggg gaatggagct cagttgtgtg gggggaccct gatcaacacc	720
atctgggtgg tctccgcggc ccactgtttc gacaaaatca agaactggag gaacctgatc	780
gcggtgctgg gcgagcacga cctcagcgag cagcagcggg atgagcagag ccggcgggtg	840
gcgcaggta tcatccccac cagctacgtc ccgggcacca ccaaccaga catcgcgctg	900
ctccgcctgc accagccctg ggtcctcact gaccatgtgg tgcctctctg cctgcccga	960
cggacgttct ctgagaggac gctggccttc gtgcgcttct cattggctcag cggctggggc	1020
cagctgctgg accgtggcgc cagggccctg gagctcatgg tgctcaacgt gccccggctg	1080

atgacccagg	actgctcgta	gcagtcacgg	aaggtgggag	actccccaaa	tatcacggag	1140
tacatgttct	gtgccggcta	ctcggatggc	agcaaggact	cctgcaaggg	ggacagtgga	1200
ggccacatg	ccaccacta	ccggggcacg	tggtacctga	cgggcatcgt	cagctggggc	1260
cagggtcgcg	caaccgtggg	ccactttggg	gtgtacacca	gggtctccca	gtacatcgag	1320
tggtgc meta	agctcatcg	ctcagagcca	cgcccaggag	tcctcctcgc	agccccattt	1380
ccctagccca	gcagccctgg	cctgtggaga	gaaagccaag	gctgcgtcga	actgtcctgg	1440
caccaaatcc	catatatctt	tctgcagtta	atggggtaga	ggagggcatg	ggagggaggg	1500
agaggtgggg	aggagagacg	agacagaaac	agagagagac	agagacagag	agagactgag	1560
ggagagactc	tgaggacatg	gagagagact	caaagagact	ccaagattca	aagagactaa	1620
tagagacaca	gagatggaat	agaaaagatg	agaggcagag	gcagacaggc	gctggacaga	1680
ggggcagggg	agtgccaaag	ttgtcctgga	ggcagacagc	ccagctgagc	ctccttacct	1740
cccttcagcc	aagccccacc	tgcacgtgat	ctgctggccc	tcaggctgct	gctctgcctt	1800
cattgtctga	gacagtagag	gcatgaacac	acatggatgc	acacacacac	acgccaatgc	1860
acacacacag	agatatgcac	acacacggat	gcacacacag	atggtcacac	agagatacgc	1920
aaacacaccc	atgcacacgc	acatagagat	atgcacacac	agatgcacac	acagataatac	1980
acatggatgc	acgcacatgc	caatgcacgc	acacatcagt	gcacacggat	gcacagagat	2040
atgcacacac	cgatgtgcgc	acacacagat	atgcacacac	atggatgagc	acacacacac	2100
caagtgcgca	cacacaccga	tgtacacaca	cagatgcaca	cacagatgca	cacacaccga	2160
tgctgactcc	atgtgtgctg	tcctctgaag	gcgggtgttt	agctctcact	tttctggttc	2220
ttatccatta	tcattctcac	ttcagacaat	tcagaagcat	caccatgcat	ggtggcgaat	2280
gcccccaaac	tctcccccaa	atgtattttct	cccttcgctg	gggtgcgggc	tgacacagact	2340
attccccacc	tgcttcccag	cttcacaata	aacggctcgc	tctctccgcg	acacctgtgg	2400
tgctgcccac	cc					2412

<210> 2879

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 2879

aagtctcaga	ggctggagag	cagagcacca	agatcgttct	ggcaggaaca	gccagtggga	60
ggttcagct	gagcgctccc	cagaggtgag	ctgateccca	gccacagcac	acaggaccag	120
gctgcgagaa	cagcatcatc	agcatcatgc	tattacaatc	ccaaacctg	gggtttcttc	180
acagctttac	accaaagggc	atcactatcc	ctcaaagaga	gaaacctgga	cacatgtacc	240

aaaacgaaga ttacctgcag aacgggctgc caacagaaac caccgttctt gggactgtcc	300
agatcctgtg ttgcctgttg atttcaagtc tgggggcccatt cttgggtttt gctccctacc	360
cctcccactt caatccagca atttccacca ctttgatgtc tgggtaccca tttttaggag	420
ctctgtgttt tggcattact ggatccctct caattatctc tggaaaacaa tcaactaagc	480
cctttgacct gagcagcttg acctcaaatg cagtgaagtc tgttactgca ggagcaggcc	540
tcttctctct tgctgacagc atggttagccc tgaggactgc ctctcaacat tgtgggtcag	600
aatggatta tctatcctca ttgccttatt cggagtacta ttatccaata tatgaaatca	660
aagattgtct cctgaccagt gtcagtttaa caggtgtcct agtgggtgat ctcacttcca	720
ctgtgctgga gctcttatta gctgcataca gttctgtctt ttggtggaaa cagctctact	780
ccaacaaccc tgggagtcca ttttctcga cccagtcaca agatcatatc caacaggcca	840
aaaagagttc ttacgggtct tggatataag taactcttgg cctcagagga aggaaaagca	900
actcaacact catggccaag tgtgattaga ctttctgaa atctctgcc ttttagatac	960
tgtgaaacaa actaaaaaaa aaaaagcttt tgttttgtat ttgtttacta tgagtcgtta	1020
tttaatttct cttgaaaata atttctcaa agcccaagtc aataaatgtt atcagccagt	1080
cttccaaaat ggtcataaac ttataaaact gctttgggta aactgagcag aagggtatac	1140
acagaaggga aaatgtgcac tcatgctagt gtgaatttgg taagtcgcgt gactctgcag	1200
gctgtttctg tattattttc aactcatat tgcttaata ttacatatta gggattg	1257
 <210> 2880	
<211> 2216	
<212> DNA	
<213> Homo sapiens	
 <400> 2880	
ggaagctcag cagtgtccac tgtcgccatt ccttgggccat agaaaacaat gtatttgaat	60
tttgatgtaa gcatagcaaa ttgaagatga agatgacacg ttgatttctt gtttgaaatt	120
aaccaagtcc cgagaaaaga aagtgaatag tgttagcacg aggaggaagg aagaaatgga	180
gattagattg gatactcttt ctgcatcact gggtagatcc agcactttaa atgactgcaa	240
cttgaagat aaattagctt ggtatgaagg tgaagcttac atgtggcatc actggaagcc	300
tttctctgaa aacctctctt ggacatgtct tgatttccaa atagcacaag ttggacctg	360
ggactactgc tctcttgtta ttgcgccac acgtctcaag tcttctgct cagatatgga	420
tctctacat tcatggcgaa gcagcagttt tgggaatttc gatcgttttc ggaataatc	480
tttatcaaaa ccagatgatt caactgaggc acatgaagga gatccacaa atggaagtgg	540
agaacaaagt aaaacttcaa ataatggagg cggtttgggt aaaaaaatga gagctatttc	600

atggacaatg aagaaaaaag tgggtaaaaa gtacatcaaa gccctttctg agggaaaagga	660
tgaggaagat ggagagaatg cccaccata tagaaacagt gaccctgtga ttgggacca	720
cacagagaag gtgtccctca aagccagtga ctccatggat agtctctaca tgggacagag	780
ctcatcaagt ggcataacaa gctgttcaga tggtaacaagt aaccgggaca gctttcgact	840
ggatgacgat gggccctatt caggaccatt ctgtggccgt gccagagtgc atacggattt	900
cacgccaagt ccctatgaca ctgactccct caaaatcaag aaaggagaca tcatagacat	960
tatttgcaaa acaccaatgg ggaatgttg aacaataaag tgggaacctt	1020
caaattcatt tatgtggatg tcatctcaga agaggaagca gccccaaga aaataaaggc	1080
aaacgaagg agtaacagca aaaaatccaa gactctgcag gagttcctag agaggattca	1140
tctgcaggaa tacacctcaa cacttttgct caatggttat gagactctag aagatttaaa	1200
agatataaaa gagagtacc tcattgaatt aaatattgaa aaccagatg acagaagaag	1260
gttactatca gctgctgaaa acttccttga agaagaaatt attcaagagc aagaaaatga	1320
acctgagccc ctatccttga gctcagacat ctccctaaat aagtcacagt tagatgactg	1380
cccaagggac tctggttgct atatctcatc aggaattca gataatggca aaggagatct	1440
ggagtctgaa aatctgtctg acatggtaca taagattatt atcacagagc caagtgactg	1500
aacacgcatt cccaactata tatctacaga tgcattccat tttaactctt cttgagctaa	1560
aacgtcaaat aggagaggaa gataagataa atatttgtaa ataaaccta aagttaaat	1620
gttttaattc gaataattgt acataaaatt ttgtatctct aacattccaa attactgtca	1680
ataaaatata tattttattt tttaaatgct atgtgttaatt atttcaacttg cttgtattag	1740
aaaggcaaaa tgtaagactt tggtagtgtg gacatatgct ttatttggct ttattttaca	1800
agtacagtat ctgcaaaaaa caaagtaacc ttttttcata cctgccagtt ttgaatttat	1860
atatgttatt gaacaaatag taatagagga ttgctgttg aaacaagttg tccaagcaat	1920
gttatattca tttttatatt tattgggaaa gtgtgagtta atattggaca cattttatcc	1980
tgatccacag tggagtttta gtaattatat ttgttgatt tcttcatttt gttttctggt	2040
ataaaagtag agataatgtg tagtcacttc tgatttagtg aaaccaattg taataattgt	2100
ggaaatgttt tgtctttaag tgtaaatatt ttaaaatttg acatacccta atgttaataa	2160
taaaaagaac tatttgcata aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa	2216

<210> 2881

<211> 1847

<212> DNA

<213> Homo sapiens

<400> 2881

ctctccgccct ccactgactc cagagagggg gatccccagt acttgactcc atcacgcaga	60
tgggagcagg caccagctat ggagagggat acagctgcgt ctccacatga cccatcctgc	120
atgacaccaa agccaccgcc agacagtgcc tcggattcta tgcaaaacct ggggaagcgga	180
gacctacccc agccccggga ggaagctagc tcttcagggg accgtctgag gactggagtt	240
tgatccatga acctggcttc gaggccttgc ttttctctct tcttcattca tattcattcc	300
caacacctta gaaggtgttg cttaatttat ttctagaaaa gcagcccaga gtcagtcatt	360
gaagccttcc ccacccctcg gccaaaaaaa aaaaaaaaaa aaaactggac acattttgga	420
tctgttgga gcttgagtc cagtgggttg catagttgtc acattgggag cagagaagaa	480
gcaaccaggg gccctgatca ggggactgag ccgtagatgc ccaggatggc acccaatggc	540
acagcctctt ccttttgctt ggactctacc gcattgcaaga tcaccatcac cgtggtcctt	600
gcggtctctc tctcatcac cgttgctggc aatgtggtgc tctgtctggc cgtgggcttg	660
aaccgcggc tcgcgaacct gaccaattgt ttcactgtgt ccttggtat cactgacctg	720
ctctcggcc tctgtgtgt gcccttctct gccatctacc agctgtcctg caagtggagc	780
tttggcaagg tcttctgcaa tatctacacc agcctggatg tgatgctctg cacagcctcc	840
attcttaacc tcttcattgat cagcctcgac cgttactcgc ctgtcatgga cccactgcgg	900
tacctgtgc tggtcacccc agttcgggtc gccatctctc tggctctaat ttgggtcacc	960
tccattaccc tgtccttttc gtctatccac ctgggttgga acagcaggaa cgagaccagc	1020
aagggaacac ataccacctc taagtgcata gtccagggtc atgaagtgtc cgggctggtg	1080
gatgggctgg tcaccttcta cctcccgcta ctgatcatgt gcattcaccta ctaccgcac	1140
ttcaaggtcg cccgggatca ggccaagagg atcaatcaca ttagctcctg gaaggcagcc	1200
accatcaggg agcacaaagc cacagtgaca ctggccggcg tcatgggggc cttcatcacc	1260
tgtctggttc cctacttcac cgcgttttgt taccgtgggc tgagagggga tgatgccacc	1320
aatgaggtgt tagaagccat cgttctgttg ctgggctatg ccaactcagc cctgaacccc	1380
atcctgtatg ctgcgctgaa cagagacttc cgcaccgggt accaacagct cttctgctgc	1440
aggctggcca accgcaactc ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc	1500
aggaccacaa gccgagaacc caggcaacag gaagagaaac ccctgaagct ccaggtgtgg	1560
agtgggacag aagtacgggc ccccagggga gccacagaca ggtaatagcc ctatgccattg	1620
gtgcacagga tgggggcaat gggaggggat gctactgatg ggaatgatta agggagctgc	1680
tgtttaggtg gtgctggttt atgttctagg aactcttcac gagcactttg taacacacct	1740
cttgcttaat cctcccaacg gcccccacaa gtagaactta gtcccttttt aaaaggagca	1800
cattaaaaat ctcagaggac ttggcaaggg ccgcacagct ggggcat	1847

<210> 2882
 <211> 1841
 <212> DNA
 <213> Homo sapiens

<400> 2882
 catcaggcac gaggcaggaa gtgcacaggc gtccggtctg ctctccctc cctgcagccc 60
 cgggcagcat ctcccagagg ctccgctggt caggctcctg gtgtgtctgc agtgcagggtg 120
 gctcctggaa gaccctcagc ctgcctgctg aggccatgtc ggactacgag aacgatgacg 180
 agtgctggag cgtcctggag ggcttccggg tgacgtctac ctcggtcatc gaccctcac 240
 gcatcacacc ttacctgcgg cagtgcagg tcctgaacct cgatgatgag gagcagggtc 300
 tcagcgaccc caacctgggt atccgcaaac ggaagtggtg tgtgtcctg gacatcctgc 360
 agcggaccgg ccacaagggc tacgtggcct tcctcgagag cctggagctc tactaccgcg 420
 agctgtacaa gaaggtcaca ggcaaggagc cgccccgct cttctccatg atcatcgacg 480
 cgtccgggga gtcaggcctg actcagctgc tgatgactga ggtcatgaag ctgcagaaga 540
 aggtgcagga cctgaccgcg ctgctgagct ccaaagatga cttcatcaag gagctgcggg 600
 tgaaggacag cctgctgcgc aagcaccagg agcgtgtgca gaggtcaag gaggagtgcg 660
 aggcggcgag ccgcgagctc aagcgtgca aggaggagaa ctacgacctg gccatgcgcc 720
 tggcgcacca gagtgaggag aagggcgccg cgtcatcgcg gaacctgac ctgcagctgg 780
 agattgacca gctcaagcac agcctcatga aggccgagga cgactgcaag gtggagcgca 840
 agcacacgct gaagctcagg cagcccatgg agcagcgccc cagccaggag ctgctgtggg 900
 agctgcagca ggagaaggcc ctgctccagg cccgggtgca ggagtggag gcctccgtcc 960
 aggaggggaa gctggacagg agcagccctt acatccaggt actggaggag gactggcggc 1020
 aggcgtctgc ggaccaccag gagcaggcca acaccatctt ctccctgcgc aaggacctcc 1080
 gccaggggca ggcccgacgc ctccggtgca tggaggagaa ggagatgttc gagctgcagt 1140
 gcctggcact acgtaaggac tccaagatgt acaaggaccg catcgaggcc atcctgctgc 1200
 agatggagga ggctgccatt gagcgggacc aggccatagc cagcggggag gagctgcacg 1260
 cacagcacgc ccggggcctg caggagaagg acgcgctgcg caagcaggtg cgggagctgg 1320
 gcgagaaggc ggatgagctg cagctgcagg tgttccagtg tgaggcgag ctactggccg 1380
 tggaggggag gctcaggcgg cagcagctgg agacgctcgt cctgagctcc gacctggaag 1440
 atggctcacc caggaggttc caggagctct cactccccca ggacctggag gacaccagc 1500
 tctcagacaa aggtgcctt gccggcgggg ggagccccga acagcccttt gcagctctgc 1560
 accaggagca ggttttgctg aaccccatg acgcaggccc agccggactg ccgggcattg 1620


```

gggccgtttg ttaagcggca ctcatTTtgc ggaggccatg cgggtgctca cccccccat 1680
gcacacgcca tctgtgtaac ttcaggatct gttctgtttc accatgtaac acacaataca 1740
tgcatgcatt gtattagtgt tagaaaacac agctgctgtaa ataaacagca cgggtgaccc 1800
gcaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1841

```

```

<210> 2883
<211> 2243
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, t or u

```

```

<400> 2883
cctcagcctg caaaggatgt atgtatgcct atttcttTng ccatagcatt tgtaaggaga 60
ctgggacata taggtgagca atggaacata tacaagtaa taatgtctct aagataaata 120
tttacaattc acaaatgtac aaagaatttt atagatgcat ccataattca ctttttgtgt 180
cattatcacc attttctcct aaattacata aaacttattt tatttattga catgtgcttc 240
atatttatca tttatcactg cctgctaatt ttcacagga gcatcaatgg ctattcaata 300
tcctatttat gtaccatagt ttataaatgt attgacattt aagtataat ttattatggt 360
ttttgctatt ataacttatt gaattgatga aatgacatac ttttattaac tgatttttct 420
aatattaatt tctagttcca tgaggcttcc acttgatgg taaaaaggg agacagcatt 480
ctacttatat gcataaatta atctaggagt gaattttatt tatctgggaa taatttttag 540
atatggcaac tctcattcat ttgacaagaa aaatctaaag ctcataaacc ctgaatccta 600
tatgcttact ctcaaaaaa tctctaattg tctgctggg atttatccac agtttagatt 660
agacctggaa tacatatggt catgcaacaa tgatcttaga acaggacttt aacttggtct 720
taggaactga ggctgagagt aatagaattg atttttttgt tggtgtgtaa gtcctatta 780
taataatgag aatactttga ttactcagt taaagtttcc ccctgattta ttgtgtacat 840
acaatgaagg atcaagaaa agaaattttt aaatggaagc attagccaga caagtttgac 900
ctcacagttt tactagggga tatatcacct agttttggat ctatttctaa catcttaaca 960
tttgaaaaag agtcttgagg aactgggttaa atcccaaaga atgctgcaat aggagggtgg 1020
cccttatgag ttatttaata tcttgagctg cttcggaata tggtgctgag caggcattga 1080
agagtatcga taaaatttat tgagaatttg tttattatga ttaacagagg taaaagccag 1140
tatattactg attaatatag gtaaaagcca gttaagaaat tgggaatgct ttctcttctg 1200

```

```

ctttcttcta cgatgcacaa ggcgtttcac atttatgcc cttatgaaat tactaggctg 1260
tcctagtcac tagatcttcc agcagtttgt agttttagag ctctcaagtt gactctgtgc 1320
ttttctatcc atacaattac acattctgtg atgatatttt tggtcttga ttacattgg 1380
gtactttcac aacctctgc tcatgaaatt tgcttttga ctactggttg tttttgcata 1440
ggccctcca ggccacgacc aggtgtttgg attttataaa cgggcccgtt gcattgtgaa 1500
ctgagctaca acaggcagcg aggggcagca agatggtgtt gcagaccag gtcttcattt 1560
ctctgtgtct ctggatctct ggtgaggaat taaaaagtc cacagtcttt tcagagtaat 1620
atctgtgtag aaataaaaaa aattaagata tagttgaaa taatgactat ttccaatatg 1680
gatecaatta tctgtgact tataatacta ctagaagca aatttaaatg acataattca 1740
attatatctg agacagcgtg tataagttta tgtataatca ttgtccatta ctgactacag 1800
gtgacctcag ggacatcgtg atgaccagc ctcagactc cctggctgtg tctctgggcg 1860
agagggccac catcaactcg aagtcacgcc agagtgtttt atacagctcc aacaataaga 1920
actacttagc ttggtaccag cagaaaccag gacagcctcc taagtgtctc atttactggg 1980
catctaccgg ggaatccggg gtccctgacc gattcagtgg cagcgggtct gggacagatt 2040
tcactctcac catcagcagc ctgcaggctg aagatgtggc agtttattac tgtcagcaat 2100
atgatactat tccactttc ggccgagggg ccaaggtgga gatcaaactg aagtgcactt 2160
tcctaatact ttttcttata aggtttttaa tttggagcgt ttttgtgtt gagatattag 2220
ctcaggtcaa ttccaagag tac 2243

```

```

<210> 2884
<211> 374
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (91)..(91)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature
<222> (151)..(151)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature
<222> (155)..(155)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature

```

<222> (312)..(312)
 <223> n is a, c, g, t or u

<220>
 <221> misc_feature
 <222> (319)..(319)
 <223> n is a, c, g, t or u

<400> 2884
 caaaaagtgt gtactaaaca atcacctggg aagggtggcc gacttcccaa tgcagattcc 60
 tgggccccat ccccaaatg ggttattagg ntctcctcca gatagctcag cattccagct 120
 ttggctgaca agcctcactc agctgactct ntttnagttg cactattaaa cgtcttccat 180
 gcaggtctta tagggaagga caaggcaag aacaaagcag tcaacaataa ggaaccaag 240
 ccctcacagg aagaaagcc tgattcaaga aaacaaagtt tgaacaagc catatttata 300
 tttaaaatg gnattaagnt tcttaaagtg gcttcataa tccttcctt aattattatg 360
 ttaccattta tgat 374

<210> 2885
 <211> 580
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, t or u

<400> 2885
 nccttttgcc catgttgtct ggaatgccct tcttctccct cttgtttaca tcaagcatca 60
 gactgaatat cctccttggt cggtcttcta aaacctcccg tccaagcga aatatattgc 120
 cctctattta tacttttaca gcatttggca cacaagtaca gagtagtagc tttttatcac 180
 attctctgat aattatatag atatggtatt tcttagctct ctctccaact ggctaataag 240
 ttgctttttg tctgagtgc taattttgtg ttttgtgtct gagtgcctca gtctctcaaa 300
 aaaaggtttt ttgattagtt cattattcat ttgaacatgg aaattatgct cactagtggc 360
 aaatgccact aaccgtattc cagaagctag gtgtcatggt tgcaataaga tatattatcc 420
 cttctacaag tcacctttta ttacaggcat ttgtaaatgc ccattaataa agtaggttc 480
 ataaatttta ccttgtaagt gcctaagaaa tgagactaca agctccattt cagcaggaca 540
 caataaatat tattttataa tgccgaaaaa aaaaaaaaaa 580

<210> 2886
 <211> 836
 <212> DNA
 <213> Homo sapiens

<400> 2886
 gatctcttgg gatcctgaaa gggggcagga aaggctgggg tcccagtgca ccctaattggt 60
 atctgagtgt cctagggcctt cagttttccc acctgtccaa tgggaccctt tctgtctca 120
 cctacaagg ggcacaaagg gatgacacca aacctggcag gaacttttca cgcaatcaag 180
 ggaaggaaag gcattcctgg cagaggggaac agcatgcca gcgtgagaag gctcagagta 240
 aggagggtta gagcccaagt attggagcct acagttttgc cccttccatg cagtgtgaca 300
 gtgggcaagt tcctttccct ctctgggtct cagttctgtc ccctgcaaaa tggtcagagc 360
 ttacccttg gctgtgcagg gtcaacttct tgactggtga gaggattct catgcagggt 420
 aagcttctgc tgctctctct cacctgcaaa gcttttctgc cacttttgcc tccttgga 480
 actcttatcc atctctcaaa actccagcta ccacatcctt gcagccttcc ctcatatacc 540
 cccactacta ctgtagccct gtccctccct ccagcccccac tctggccctg gggctgggga 600
 agtggtctgtg tccagctgtc tcccctgacc tcagggttcc ttgggggctg ggctgaggcc 660
 tcagtacaga gggggctctg gaagtgtttg ttgactgaat aaacggaatt cagtgcgaaa 720
 acaaaaaaat aggaaataaa agatctcgga aaatagcatt ttgttaaaac cttggggggt 780
 aaaaccccg ggagttttta cgaaaaaatt ccagggaaca caactgggg gccaaa 836

<210> 2887
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 2887
 ttttgttttag cttaagtcac ggggacaact cttcaattta gaacttaagt tgaattataa 60
 aaatgatgga tataagtgtg agctgtatct agtgaagtgt ctgtcagtaa gtgaacatt 120
 ttttgggtgt ggcttatcca caaacagttt agttgtgaa taaaacttat gagtgacatc 180
 tggaaagtaa ccattgctaag atggcaagca cactggaac aattaggcca cttggctttc 240
 ttttgcgtga ttgttttata agcctacttt acctcccagt cttggaaaca agttttagtt 300
 ttttattggt ttggagacta gagccaatag tataatgttc tcaaaggaaa cagacttgag 360
 ttgttggtat agaggaaact acccaactta tatgattttg tttttggttt ttgtcgtgta 420
 gttatggcac tgtcttattt ggaacatttg caactaggga taatacaaca tttttaactc 480
 tcatttgaca acctactact aatcacagac cacaaggga atgaccaa tttatgtggtt 540
 ttgtcactcc atagtgtct tagcccaatc tttctatact cttacgatta ctgggggtta 600
 cgcttctgtg aggaccttct ggctcttgag ataccctaaa tatttacaga tacttagata 660
 tcttgaagat agaataggat atcgagattg taccaaatag gaatatcagg agtatggtac 720

aatgagcag atacctgttg aa 742

<210> 2888

<211> 440

<212> DNA

<213> Homo sapiens

<400> 2888

ttttttgggt ttttaaggagt ttattgctaa tctgtaaaac agaaagagac aggagataag 60
catgacaaaa tatagggaag aatgacttt tgcctaaact tccaaattgt gtacaattga 120
agcctctgct ttatagctct tagcacacct ctcaataaag aaggcagtag tgggaaggct 180
ctgaacctgt ggcagaacca ctgatagctg tggagctatt ccaaggagtc tgggaatcag 240
ggggattatc aagatcattg ttagaataaa ttaattctac tgtatatata gcagaagttt 300
tcaagcatat gtaaatgcta ctaataacca aataattaca ccttggtttt ctttaaaactg 360
taactctcaa gtatgtctct acataatttt ttgatggtag tgtctgcatg ctcaaaaagc 420
ttgaaaacac tactggagaa 440

<210> 2889

<211> 524

<212> DNA

<213> Homo sapiens

<400> 2889

tgcttattga aactgaagg atgttgggaa agacagactg ggagctttct cttaaatttta 60
atacagcatc agtgcttcct ataattgtcca ggtaggaga gaagcaaatg gagctttact 120
aaggaagaga aagtgatcaa taccagttag aaagtgaaa aaaaaaaaaa acaaacaaaa 180
acgaaaaaaaa aacctaagca aattcagtga gaaaagaaaa agcagaactt agagtcctta 240
cccttcaatt taaggaagga gaggatttgc cttagcagaat cttgaaataa aatttcctta 300
gaaagcccca gaaagttttg tgtgtattgc aagtccaaag gataaggaga acttctatat 360
gctttcttct tatttccact gggtcaagta ctgtccatc aagactcagc ccgcatagag 420
gctttccaat caactctcaa ccaccacaac agttagggtt ttttctctta tgttgcaaaag 480
cactttctgc ataactcaga atgcaaaatg tactcattca ttgt 524

<210> 2890

<211> 575

<212> DNA

<213> Homo sapiens

<400> 2890

tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60
ttttttggac ccaaaaaaaaa aaacttttta aggaaggggg acccagttta aacccttcc 120

```

aatgcggccc caaccctgcc ccacggaac cgccatggc aaccctaaa taaaaagggg 180
tttttgaggc ggccggcccc caccaaaagg atgcccccaa tttttttttg ccagggggga 240
atgtccttgg acacggggcc ccaaaattcc ccattgccgg ggtttgtact ttaaaagggc 300
ttcctaacct cctccgggtg ttcctaaggg ccattgctga gctaaaactt gtaaaaaaag 360
gcccaggctt cccccaggtc cgagtaaatt ttcacagggg gggggaacca cccctggccc 420
ttgggggatt tccgttgact caaaacagt ttggccacgg ccagaaccac atgggggtaa 480
tgctcacact ttttaaggga atccacgctt tggggcctcc tgtggggcct tgccctggagg 540
aagatggcct cacaccaaa gataccggag ttggg 575

```

```

<210> 2891
<211> 467
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (428)..(428)
<223> n is a, c, g, t or u

```

```

<400> 2891
tgatgccaa gccccaggag ggctttattt tttctttca acatcctgga acgggcttt 60
cctggccatt tttgccgga tccccaaagc ccggcggttg gcacggccca taccgaaact 120
atgcaagggt tcgaaattat cttttccctc acggacaact cgagctttct ccttattata 180
ctaccttccc tacggcatg accggaccgg tcacctgggg ggccacgcac atttctacag 240
gaaaactggc tcccttcttg ggggcccagg gcttctcttg gaaaaggatg agtttggagc 300
ggtactccct cagccgggtc acgttgatct ggagggactc cgcggacttg ctctctgtcc 360
tgggatccac aaaaatgcgc taagggtccg ccacacctct tgggaatgcc gccaccctg 420
agctcctnca ggatgaatcc gcggccgact cgcaccttct tgggtac 467

```

```

<210> 2892
<211> 473
<212> DNA
<213> Homo sapiens

```

```

<400> 2892
ttcatttaat ggcacatgat gatgcacaca aaatttcaac tctcagtctg gaatcagccc 60
acaggctctg agctataaaa atcatctcga aaacatgaga tttcagagat ccagttctca 120
gtgttacctt gaagatgaca atttatgaag aaacagggtg ttttaatccg aaattgccag 180
gaaacaaatt actcctcaaa agcccttgga aagtaataag atagctaggc agaaaaaaa 240
agattctgca aaactaaact taatgtgtat tcatctagac ctgaattaaa aataaaattc 300

```

cactataaaa agaatttttc aaaatgtag gcccaagaat atggccatat tgttccatct	360
tgaagaaccc agttgattca gtttcattac tggectcccc actcttctaa gtaagtcctc	420
cactataaac atttacgaat tccatctcag cattagtact aaacaatatt cat	473

<210> 2893
 <211> 546
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (280)..(280)
 <223> n is a, c, g, t or u

<220>
 <221> misc_feature
 <222> (537)..(537)
 <223> n is a, c, g, t or u

<400> 2893 cggtagtagc ctcagttact tttaatatta aatgtctttt taccctagta aactactccc	60
ttgtctaatt ggagaacttg caaatgagat ttaaacatt gtaattttta taaggtaaca	120
gaagctagat ccttttccat gttcatctca agctattgat cttgtcagtg ttgtacagat	180
ctagaatggg ttgtcaggga taaggctact gatctgagtg tgattgttga catctgctga	240
ctccacacaa caaccctagg ggaccggtgc ttgagcatn cttattttca gatggtttgc	300
ccacttcatg cagttaacag ctgttggtgt tgggcttcaa atccaggctc ttccgacatc	360
aatccccagc ctcttaacaa ctcaccaagc agtgattact actccccaac ataggggcag	420
tatgtacaag tcattgttga ctaatacagt ttctttcttt gataggaata ctaattttgt	480
tgaacaagaa aatatgtact ggataagagt aaggcatttg acaaggcgtc ctgtganatc	540
tgtgaa	546

<210> 2894
 <211> 1993
 <212> DNA
 <213> Homo sapiens

<400> 2894 actcatttat accaggaaac agacaagaga acaagaggct gccgaagaca aaacttctct	60
gcaagcacct gtgcacagca atgtgcgttg gcatctgtga gaagaagaga atctgtgaag	120
tttgagcaag cggtcttccc aagatgtacc gaatatctca actgatgtca acaccagtag	180
caagttcttc caggttgga agagaatatg ctggagagct gtctccacag tgcattttcc	240
caagtttcac ctgtgattcc ctggatggtt accattcttt tgaatgcggc tccatagatc	300

ccctgacagg	ctcccactat	acctgtcgcc	gaagtcccag	actcctcacc	aatggctact	360
atatttggac	tgaagacagc	ttcctgtgcg	acaagatggg	caacataact	ctgaacccat	420
cccagaccag	cgttatgtat	aaggagaact	tagttagtag	ctccaaatct	tggtgcatg	480
gaagtatctt	tggtgacatc	aactcttctc	caagtgaaga	caactgggtg	aaggggacca	540
ggaggttggg	cacagaccat	tgcaatggaa	atgcagatga	tttagactgt	tcttctctga	600
ctgatgactg	ggagtccagg	aagatgaatg	cagagtctgt	gatcacctcc	tcttccagcc	660
acatcatatc	tcagcctcct	ggaggaaact	cccatagctt	gtctcttcag	tcccagttga	720
cagcttctga	acgtttccaa	gagaatagtt	cggatcattc	agaaaccagg	ttgttgcaag	780
aggctctctt	tcaggcaatc	ctgcttgctg	tgtgcttaat	cacttctgca	tgtgcaagat	840
ggtttatggg	agaaatatta	gccagtgtct	tcacatgctc	attgatgata	actgtagctt	900
atgtgaaatc	attgtttctc	agccttgcca	gctatttcaa	aaccactgcc	tgtgctcggg	960
ttgtcaaaat	ttgacaacca	tttaggaatg	ccttcgatga	atgtcctcca	tctgaatatc	1020
tggaatattg	ccaacttgca	gtctacttgg	aatcaagtgt	tttataggaa	gggagtaagc	1080
gagtaatgga	gaaaaagcca	ttttagtgtg	actatgtgat	tttaaaatga	tctcagtttt	1140
tccatcaaaa	ttataatatg	ctcatgaaaa	taatatataa	ttgccttccc	tttgcaaaaa	1200
ccggcagttg	aaaggaaaag	gacggggaat	gtgatggaaa	agagaccgcc	tggaaataat	1260
gtccccctat	gattctttta	ggcagtgggt	ctcgagcttg	aattttcatt	aggaaaattct	1320
gtgaggagct	tgtaaccaga	tttctgggtc	tgccacatgc	acctatctct	tgctgaattg	1380
ctttaataga	ataatgagag	caagtttgtc	taactaatac	caacctgaca	acttgaataa	1440
caataaatgc	aatttgtaca	taaaatataa	tgctgcaaaa	gtttgtcatt	cacctcagtg	1500
gagtgcattg	atattagggtg	gtaaccgtag	atgatgggta	atatgaaaaa	ggacaggaaa	1560
gaagcatttt	ctgaaagtta	tattcttttg	aaccacgttc	taaaccaagt	ttttaatctt	1620
cttggggctc	gtaattacct	ttcactttaa	tgtcacttaa	agatataaca	cagaaaaatg	1680
ccttgagggc	aaaatatagg	caaaacacca	atgcgctttc	aaatgcatga	aaatggtgca	1740
gtgtaccctt	tgagccttga	ctcaagggct	gtagatgttc	cctttccacc	ccccacactt	1800
gggtgcgtgt	cacaaagcaa	atatggcctg	taattcaaat	ttgttctatg	tgatactctc	1860
tgagtaaaaa	ctcatatcag	cagaaaaatg	tctttgctcg	aaatgataat	gccaaaatat	1920
aactttatat	ataatttgca	tttagtacat	ttttgggtta	aaaataaact	aataaataag	1980
tgaagtcac	agc					1993

<211> 521
 <212> DNA
 <213> Homo sapiens

<400> 2895
 tgaagtgttac ttaagcttta tttatatata tagtgcgtag gttcctggag cacaagaag 60
 aaagtgtgctc agattttatcc agacctcaca taagtattata gatttcaagt agccactgta 120
 ttttattaca gaaaatacat tcttcaagag gaaaatgta aggccatagc agctttcacc 180
 ttagctatct aagcttgtat taggtcatca ttaaatagta tctgtatcat tcttatgtgt 240
 tccgtaagtt atgccacaaa taccagacca agtacactca gtctagaaac aaaaagtggt 300
 gaaaataaagg ttaaaacatt ctaataggtg taatgggctg atagatgact ttatattaca 360
 aagctactta agacaattct acttttctag aatacacgc attaatataa acatttgaaa 420
 ttcagaagat ttggcctgtg gatgctttgt ttctcaatgc aattcttggt aatatgttag 480
 taagtaataa tttattaata ccaataataa aaaattaaca t 521

<210> 2896
 <211> 1679
 <212> DNA
 <213> Homo sapiens

<400> 2896
 gtttggtggc tgcggcagca ggtagcaaag tgacgccgag ggccctgagtg ctccagtagc 60
 caccgcattc ggagaaccag cggttaccat ggaggggac agtatataca ctccagataa 120
 ctacacogag gaaatgggct caggggagta tgactccatg aaggaacctt gtttccgtga 180
 agaaaatgct aatttcaata aaatcttcct gccccaccat tactccatca tcttcttaac 240
 tggcattgtg ggcaatggat tgggtcatct ggtcatgggt taccagaaga aactgagaag 300
 catgacggac aagtacaggc tgcacctgtc agtggccgac ctctctcttg tcatcacgct 360
 tccctcttg gtagttgatg ccgtggcaaa ctggtacttt gggaaacttc tatgcaaggc 420
 agtccatgtc atctacacag tcaacctcta cagcagtgct ctcatctggt ccttcacag 480
 tctggaccgc tacctggcca tcgtccacgc caccaacagt cagagggcaa ggaagctgtt 540
 ggctgaaaag gtgggtctat ttggcgtctg gatccctgcc ctctgctga ctattccga 600
 cttcactctt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctaccc 660
 caatgacttg tgggtgggtg tgttcagtt tcagcacatc atgggtggcc ttatctctgcc 720
 tgggtattgtc atctgtctc gctattgcat tatcatctcc aagctgtcac actccaaggg 780
 ccaccagaag cgcaaggccc tcaagaccac agtcatctcc atctgtgctt tcttcgctg 840
 ttggctgcct tactacattg ggatcagcat cgactctctc atctctctggt aaatcatcaa 900
 gcaaggggtg gagtttgaga acactgtgca caagtggatt tccatcacgg aggccttagc 960

```

tttcttccac tgttgtctga accccatcct ctatgctttc cttggagcca aatttaaac 1020
ctctgccag cactgactca cctctgtgag cagagggtcc agcctcaaga tcctctccaa 1080
aggaaagcga ggtggacatt catctgtttc cactgagtct gactcttcaa gttttcactc 1140
cagctaacac agatgtaaaa gacttttttt tatacgataa ataacttttt ttaagtac 1200
acatttttca gatataaaag actgaccaat attgtacagt ttttattgct tgttggattt 1260
ttgtcttgtg tttctttagt ttttgtgaag ttttaattgac ttatttatat aaattttttt 1320
tgtttcatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgcgtatgt 1380
ctcgtgtag gactgtagaa aagggaactg aacattccag agcgtgtagt gaatcacgta 1440
aagctagaaa tgatccccag ctgtttatgc atagataatc tctccattcc cgtggaacgt 1500
ttttcctgtt cttaagacgt gattttgtgt tagaagatgg cacttataac caaagcccaa 1560
agtggtagat aaatgctggt ttttcagttt tcaggagtgg gttgatttca gcacctacag 1620
tgtacagtct tgtattaagt tgttaataaa agtacatggt aaacttactt agtgttatg 1679

```

<210> 2897

<211> 450

<212> DNA

<213> Homo sapiens

<400> 2897

```

ttttggcggg gcagggttg gcgggggcag tcctttgaac taagattctc tcaggaacca 60
ctgcaggaaa tgaagtgtat cagaactcac caattatgaa ctaaccttca atgccagagg 120
ctttaacagt ttctaataaa aattcagttc agatctcaag ttcagataag tctgaaaaaa 180
cacttcaagg tcatttgaac gaacatatcc taccagtact ttatataatt gtatttacct 240
gttcctaaaa ctttcctgta aagaaatggt gaattttctt cagaaatagt tttgagcaaa 300
atgtcaaaac aattctccca tgctcaggtg acttttgact atactctgaa aatattttct 360
cttgttttcc tgcacttacc tgttagtgtg ctcacactcc tgtattatgg aacatgttca 420
gtaactcata cacatgtaac acagaagtct 450

```

<210> 2898

<211> 260

<212> DNA

<213> Homo sapiens

<400> 2898

```

ggcatgacta gaggtgtgac taataataat ccctcacatc tctatagcct aatacagttt 60
tccaagggtt ttctcatcca tgatctcatt tgatccttgc agcagtccta tgaggagggc 120
agcacatata tcattagctc ccttttgcca aaggaggaaac aaaaaacagg tgaaggaggac 180

```

ttgtctaagg gcaccagct ctaagggaca gagcaaagta acaggtcatt tctttttttc 240

attttatttt agagacagag 260

<210> 2899

<211> 452

<212> DNA

<213> Homo sapiens

<400> 2899

tttttttttt tttttttttt tttttttttt tttttttttt ttggaaatt ggaaggga 60

aattaattaa gttttttaaa gccatcaagt tacaaggga tattagggtg ctaaaaaaga 120

caaagagtat ccaataaaac aaaaagcaat tccagatggt tttaggtgga acaattttgg 180

gccagtata tctataggcc attcctaatt tacttagcaa actttatccc ggggattggc 240

aaataaaaa aaaggaagaa ccaacctata ttttcttttc gggttttttg aaacagagcc 300

tcactctgt catccaggct ggagtacagg ggggggatct cagctcaaca taccctcaac 360

ctttggggt caaggaatct cgggcctaac cctccaagc agtgggact acaggcatgc 420

accaccgggc tcggcaatt ttttgcat tt 452

<210> 2900

<211> 511

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (500)..(500)

<223> n is a, c, g, t or u

<400> 2900

tttttttttag tgttttaggt ttaaatgtca agattaagca tcaacaatt gtaaaaaaa 60

gatgttttaa cagagtggac aggtaataaa caggttcaac aaaggcagat gttcttggag 120

gttaaatccc actaatcaac acgattaact ttaagggtcc tgagactttc aatagcatgt 180

acctcatgga ctaaaaaaga ggaagagttt atgcttcaca attaatctcc agaacttgac 240

acatgtaatt cttatcacca aggcctttaga ttgaaaagta atagaaaaca acagtaactg 300

ttctggtaca gtctagcatt tccaatgtgc ttctttttat ttaaatgaaa aaaaaagata 360

cattatatca aacaaaactg ttgatggatc cacatctttt caggctcttt gcggaatggc 420

tcaccaaata cacatttcca tcttttagatc attatactgc ttaaacagca agatatgcta 480

aagagatatg aatatgattn tgacctacca t 511

<210> 2901

<211> 541

<212> DNA
<213> Homo sapiens

<400> 2901
 tttttttttt ttttttctt gacgtatata gatcatcctg gacagtttat ttctctaatt 60
 ctgttaataca aagcagagat cagaacggat taactgtggc aacgtcgtat caggagcaca 120
 aagagaagcc tgcctctttc agtttgggtct tttctccagc aaaacagaaa tgcaatttag 180
 tcaaacacat acagaggccc cactgtactg cctcactgat ggaggggaaat acttgggtgc 240
 aatcacacac agtggttagtg attggcaact gtccagtgtc atttcgctaa aactggtaaa 300
 aacagtttcc ttgggcaagc agctgattgg ctacttcata ctgtgctgag ttgggctcag 360
 cttgtctgtc tctgggaggc cctaaggggc tctctttttt cagctagggg taaggggaga 420
 ctgtcaacca gtatcttagc gtgaactgtc aatcgctgag cccctgcaa ggactctctg 480
 gaagtcctc aggtatgctg aaaatacctt atactgaaa ggtagctctc gctgcaccca 540
 c 541

<210> 2902
<211> 646
<212> DNA
<213> Homo sapiens

<400> 2902
 gaattaaaaa taatactttt attgctgggt atgctttctt aaaagtaaaa attattcttg 60
 attgatgtga cttgccagaa tgtttgaaac accagtgtcc aagggtcact atatctgccc 120
 ccaaaccaatt ccaccatgtt tacttatata gcactcacca aaccagaaga gaggtctggga 180
 tattctcagg ccaactgact gaacatcaat atgaaagaac catgaatgat gcgacaactg 240
 agttgatttt ctactctctc tgcccaccat gactttgtac cccaaattct ttcagtgtct 300
 ttcaaggta caacctctct tctgggcaca ggttggtggt gtcacctcaa ggtatgttcc 360
 ttcattctgc agtgatttcc tgctctgtct caattaagga agttgagaat acagataact 420
 caggatcatg ttaattatg taaaaagct ctaaaagtcag gtaatgggtt tcatgtgctt 480
 ctcttgagca gtctgaggag agaatagaaa cagaaacccc ttggggcctg agtagacgca 540
 gctggccatg cacaggcaga ggctcttgggt cagtgcagga agcagagtca cagccatcgc 600
 cttgggggtg ggatgaaatg agatgacctg ttggctgtat gacagc 646

<210> 2903
<211> 557
<212> DNA
<213> Homo sapiens

<400> 2903
 atctcaaagg caattgagtg ggtcttctg gccagacctt ttaatttac gaaacatagt 60

```

accttgccaga gaataggcat tgaaatatta tttaacaat caaaccaag atgttcttct 120
atcttcagct gtcagtgate taatgccctc atctctctta tcttcaggac ccagaatgg 180
atattccaca taaaagatgc ttgtttatc aaatgaatca aaaagcagc ctgaggcatt 240
tatttttact cctttacttc tgtaggccag gtcaaggtgg gtctaattca cttttatcat 300
cagcacttaa gaaactggat ggaagaccac aacacctgt tttttgcaa aattttccat 360
ctcctcaatc aggccaggaa gcatgtatct tctggacagg actttatctc tctactcagc 420
ttagtacact gccttatatt agtcatttg tcccatggtt tcatcactga ataaactgt 480
taaatgactt ttggtctgga tctcacacct atattacttc atttctcttc gtgagcactc 540
tataatgata acatcat 557

```

```

<210> 2904
<211> 488
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (239)..(239)
<223> n is a, c, g, t or u

```

```

<400> 2904
gcggccgcgg aaactttgca ggcccgcggc atcgagcagc gcgggcctag ggcgggtgtg 60
tgcgcggtgg tcgagagggt acaggagccg gcctctgtcc ttaatggagc gccagagct 120
gggtgggggc ggcccgggag ctcgggggtc ccggcactac ctgaatgcag cccgaagcca 180
agttgtgcac gcgtttgtcc tataaaagcg aagtgaatgg attcccattt tggaatccnc 240
ggtgtctcca acctcgagtt ggagaaccat gttgagtcag ttcccggaa cttacaaat 300
ggactccact tccccgttc ccattctacc gtttttttta aaaaatgatt tttttgagtg 360
gcggttccag gattagtcaa atagcttctc ccgagaatgc tctttaaaag attgtcagac 420
acctttgggt taagtctcag tttttgcatg ggcccgaatt gcagtcctat gaatttctga 480
tttattca 488

```

```

<210> 2905
<211> 696
<212> DNA
<213> Homo sapiens

```

```

<400> 2905
ttcccccccc ccccccccc ccccgccga gcacaggaca cagctgggtt ctgaagcttc 60
tgagttctgc agcctcacct ctgagaaaac ctcttttcca ccaataccat gaagctctgc 120

```

gtgactgtcc tgtctctcct catgctagta gctgccttct gctctccagc gctctcagca 180
 ccaatgggct cagaccctcc caccgcctgc tgccttttct acaccgcgag gaagcttctc 240
 cgcaactttg tggtagatta ctatgagacc agcagcctct gctcccagcc agctgtggta 300
 ttccaaacca aaagaagcaa gcaagtctgt gctgatccca gtgaatcctg ggtccaggag 360
 tacgtgtatg acctggaact gaactgagct gctcagagac aggaagtctt caggggaagg 420
 caccctgagcc cggatgcttc tccatgagac acatctcctc catactcagg actcctctcc 480
 gcagttcctg tcccttctct taatttaate ttttttatgt gccgtgttat tgtattaggt 540
 gtcatttcca ttatttatat tagtttagcc aaaggataag tgtcctatgg ggatggtcca 600
 ctgtcactgt ttctctctg ttgcaaatac atggataaca catttgattc tgtgtgtttt 660
 ccataataaa actttaaaat aaaatgcaga cagtta 696

<210> 2906
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2906
 tttttaagtc acccagtttg tggactctta ttacagcagc tcaaggagaa ttacaaagtg 60
 gatggattga gtacaagttc cttcatcgta agtgggaagca gaagttccta actcttttag 120
 tatttgtcat ctgaactact tttctatctt ttacctctc caatagataa gttattagaa 180
 ggcaaatatt gcttcttgat tttttgttt cctctctatc aagcttgaat tttatgtgca 240
 cgtaaggtag atgtgaaatt catgggcac aaatatgggt gggtaaaata taattttggt 300
 ttctataatt aaaattatct tatatctaga tccttggtgc attgggg 347

<210> 2907
 <211> 549
 <212> DNA
 <213> Homo sapiens

<400> 2907
 tttttgttt tccttgact ttatttatct tcataagtca caaaatgtga gtgcagagat 60
 aaatgtctgt gtgcatgtgc cctgagcaca cagggtggca taactcggca cactcataat 120
 gacacagcgg ttcaccagc cacagatagt gacagggcac acatggcgac acccacatgt 180
 acggagataa atctcccca ccatgacatg ggtagacaga aaacacggcg cagtatactc 240
 tagtatgttt acacaaacag ggagacaggc ccgtgcaatg catgtacca acaccacac 300
 tcagagtgtc atctgctgga ggtgctcaga cacagccacc caccgtgaca tgccgagact 360
 cacatatgtc acatgacaca ggcattgcat ccacattcac tgtgactctc agtcttatc 420
 attcatcacc tttctgggag atacctgaa atgtccacc tttgcaaat gcacacacac 480

gcgcacgcac acacgcacac acacgaacac acgcgcacac acgcacacac acgcacgcag 540
gtgtacaca 549

<210> 2908
<211> 400
<212> DNA
<213> Homo sapiens

<400> 2908
ctttcttttc tcttctttct tcacgcaggt acaaaggaca gagtatatct cttcactcag 60
gttcagagga cagaataatg aatctctctt cttctctctt ttcttccttc ctctctcttt 120
tccttccttc ctctcccttt cctatggaca gctgagaatc attttctaac ttatatcaat 180
atgtccctc ctcttaagat agcctgccct ggtgtcttcc tatgtctctt gcagctgtac 240
caggcactgt aggggaagagg cccaaatgca ccacactggc ccagatatcc agaggccaag 300
gccacggctc tgcaccacag cgtgagagtt cttctttgca gtgcctacaa acctatgctt 360
gcccccaaac tcgctcaggg gtaacggggg tggggaaaga 400

<210> 2909
<211> 547
<212> DNA
<213> Homo sapiens

<400> 2909
tttttttttt ttttggtttt gaacctttaa taaaagtaaa aaatgaatgc aaaaagaaca 60
caatgttgaa aacttagtat gaatgtgaac ctactagat gttcaaatct ggtagatgac 120
aaattttgtt catactattt tacattttta caaactcaaa tcacttttgt tcatatattt 180
tctataaact attggcaaaa aaatcctcaa atttacattc ttttggttac attattttcta 240
acagatatag atttacttcc ggtttcggag agaaagactt atttgtgtgtg cgtgatcaag 300
tctgttttaa agattcactc gctgctttca tctaataact tctggttttt cataaaatgc 360
tgacatcttc attggaaatt tttttcatgt aactgttttc attttcagaa aatatataag 420
ggggtcattc caaagttcag aatgatccta tttttttaa aaacaaaatt cctgtaaaac 480
aaattaactc caggaactta aaatttactc caagacattt ccctcaaaac aaagcaaaaa 540
acccacag 547

<210> 2910
<211> 549
<212> DNA
<213> Homo sapiens

<400> 2910
attttggaaa atgttaaaat ttattaataa tagttaacat cacatagtta attaaactag 60

```

ttatgtattg tacataatga caacatcttc actagactga gtgctcaagg atttgagatg      120
attcgctatt catcacaccc cgaagattga gatccactgt atttacacaa agcaaaagcca      180
tgtcagcaag ggactgtcaa cctgattctg agaacataaa cattcaaaat tttttttcca      240
gtgttccttt ttggaaacca acaacacatc ttaataacct acacacacac acatctctac      300
ctttaaaaaa aaaaaaaaaa tgtaacttca cagatagtag ctaatcttca agcttaaaat      360
ttaagttaaa attaatctct attttgtggg caccctttag tgaactaaaa tctacatgaa      420
accttttggc ttttgtgtag caggaaaatac ccacgttttg ggtcaattag tgcagatggg      480
agcagcagag gagctacacc agacagcaaa gcaagactag agcaaacgag aaggaccagc      540
ccctagccc                                         549

```

```

<210> 2911
<211> 408
<212> DNA
<213> Homo sapiens

```

```

<400> 2911
tttttgcaat gtagttttgt tggaggccat tttttattgc agacttgaag agetattacg      60
ttcgcggcgt ggcgcccggt ggtecccaag gggaggggaag ggggaggcgg ggcgaggaca      120
gtgaccggag tctcctcagc ggtggctttt ctgcttgcca gcctcagcgg ctggcgccaa      180
aaccggactc cgccaccttc ctgcgccctg cggtgcgagg gtgtggaatc ctccagacgc      240
tgggggaggg ggagttggga gcttaaaaac tagtaccctt ttgggaccac tttcagcagc      300
gaactctcct gtacaccagg ggtcagttcc acagacgcgg gccagggggt ggtcattgcg      360
gcgtgaacaa taatttgact agaagttgat tcgggtgttt ccggaagg      408

```

```

<210> 2912
<211> 525
<212> DNA
<213> Homo sapiens

```

```

<400> 2912
taatctcaaa ggcaattgag tgggtcttct gggccagacc tatttaattt acgaaacata      60
gtaccttgca gagaataggc attgaaatat tatttaaaaca atcaaaccaa agatgttctt      120
ctatcttcag ctgtcagtga tctaattgcc tcactctctc tatctcagg acccagaatg      180
gtatattcca cataaaagat gctttgttta tcaaatgaat caaaaagcac gcctgaggca      240
tttattttta ctctttactc tctgtaggcc aggtcaaggt gggcttaatt cacttttata      300
atcagcactt aagaaactgg atggaagacc acaacacett gttttttgca aaaattttcc      360
atctctcaa tcaggccagg aagcatgtat cttctggaca ggaactttatc tctctactca      420

```


gcttagtaca ctgccttata ttagtccatt tgtcccatgt ttctcatcact gaataaaactt	480
gttaaatgac ttttggctcg gatctcacac ctatattact tcatt	525
<210> 2913	
<211> 1085	
<212> DNA	
<213> Homo sapiens	
<400> 2913	
ttatggatcc agaagtata ttcatcagc atattaaaga tatgtgcttt gacattcatt	60
tgaattggag attcaagcct attgttatct tatgaacact tcagcaaaaca ggtctgccat	120
tcttaaaaat ataatgcttt gttggacaaa agggacaagc cagctccctt ggtcctctcc	180
tctattcgcc tgtgaactcc atccacacgt aaaggacctc tgggtctgac tgtccctcc	240
acaggcatgg tgtgggaaa aggaaacagg catatctggc ttttcagatt ttaaacggga	300
aactctcaca gtcacaaatc caccatgaga cttgggagat tggatgagct gtctcccaaa	360
ccctaacacc ttccaccttc tcaaaatgaa ggctgccctt tcactgggag gttctgaatg	420
cgggattggt gctgactcag gctgggcaca aaggagaaca ggaggacatg gaaaatccga	480
caattcgaag tacaatat tcaaacacat gtgaaaacca tttggaaaga agaaaagagg	540
tatctggaat gatttcatga cagaaatgaa aaaagataaa tttagttcta atcttctctg	600
caacaaagcc ccagaggaga aggtttcatt gtctgaagat aaaaacacac ccgtttgcct	660
ggatgatgaac acagtattcc tgcacaaat tctagaaga atatacttct ttctaacaaa	720
gccaaagatt tttctgtac tcattacagg gggcttttaa tcctaacata ttttttaact	780
ccttatgaaa atgcataaaa gttaaaaaga tatttcacga tagaatcaag cctatgaaat	840
cgtaaatctc attaatctct taacgaaccg aattaaggac caaaaacaaa cctgtttttt	900
tcacaaaggt tggatgtgt aaacgtccga aagtgtcctt ttatacgaaa gacagtaatc	960
tggggaaata ttactggaa tgacacaggt ctttggggga aggaactatt taccggataa	1020
atgggaaaag aaatgttagc gagactatgg tataacacgg gctaggagat aacaaataaa	1080
tatta	1085
<210> 2914	
<211> 2610	
<212> DNA	
<213> Homo sapiens	
<400> 2914	
ccgctggttc cgtaacaaca tcccgttggc ttccctcagg cggcgggacc agtgacgccg	60
ccgcctccca ggatcgctcg ccggtcaggg cccttgccct ccccggcaca ggcacccatg	120
gccaccaacc cacagccgca gccgcctcct ccggcgccgc cgcctcccc cccgcagccg	180

cagccgcgagc caccgcccgc gccgccgggc cccggggctg gccccggcgc gggcggggcg	240
ggcgggcgcg gtgcggggcg cggggaccgc cagctcgtgg ccatgatcgt gaaccacctc	300
aagagccagg ggcctcttga ccagttccgc agagactgcc tggccgacgt ggacaccaag	360
cctgcgtatc agaactctgag acagcgtgtt gacaactttg ttgcaaatca cttggcaact	420
cacacatgga gtccgcatct caataagaac cagctaagaa acaacattag acaacaagtc	480
ctcaaatcag gaatgttgga gtctggtatt gaccgaatta tttctcaggt tgtggaccca	540
aagatcaacc acacattcag acctcaggtg gagaagactg tgcgatgatt tttggccacg	600
ctaaatcaca aagaggaagc aagtggcaac acagctccgc atgatgagaa accagacact	660
tcctttatta cacaagggtg tcctactcct gggcccagtg ctaatgtagc caatgatgcc	720
atgtcgatat tggaaacctt aacttctctt aaaccaaga cagtgctgc tagggcttca	780
acagaaacat caaatgccaa gaccagtgag agagcgtcaa aaaaacttcc atctcagcca	840
accactgata ctagtactga caaagaaaga acttcagagg acatggctga taagaaaaa	900
tctacagctg actctggagg tgaaggactg gaaacagccc caagtctga agagttcagc	960
gacctccctt gtccagtcga agaaattaaa aattacacaa aagagcataa taatttaatt	1020
ctgctaataa aggatgttca acaggaaagc agtgagcaaa aaaataaatc aacagacaaa	1080
ggtgaaaaga agccagacag caatgagaaa ggagaaagaa agaaagaaaa gaaggaaaag	1140
actgaaaaga aatttgatca ctcaaaaaag agtgaagata cacagaaagt taaagatgaa	1200
aaacaagcaa aggaaaaaga agtagagagt ttaaaacttc cttcagaaaa gaacagtaat	1260
aaagctaaaa ctgttgaaag gacaaaagaa gatttctctt tgatagattc tgatgtggat	1320
ggacttacag acatcacagt tagctctgtt cataccagtg acctttcatc ttttgaagaa	1380
gatactgagg aggaagttgt aacgtctgat agcatggaag aaggagagat tacgtcagat	1440
gatgaagaga agaacaaca gaataaaaca aaaactcaaa ctagtgatc tagtgaagga	1500
aaaacaaaaa gtgtacggca tgcgtatgtc cacaaccat atctttactc aaaatactat	1560
agtgattctg atgatgagct tactgtagaa caacgacgac agtccattgg tattttgtgg	1620
ttttaggcca aagaaaaaga agagaggctt ttaagaaggc aaatcaatag agaaaaactt	1680
gaagaaaaac gaaaacagaa agcagaaaaa acaaagtctt caaaaaccaa ggggtcaaggc	1740
aggagtatgt tggacttaga agaactatca acaaagagtt tggaacctaa agcccagga	1800
attaaagaag tccttaagaa acggaaggtt ttagaaaaa aagtagcctt aagcaaaaag	1860
agaaaaaaag attcaaggaa tgttgaagag aactccaaa agaaacagca atatgaagaa	1920
gattccaaag aaacccttaa acaagtgag catttgtgaa aggaaaaaat ttctcttctca	1980

```

aaggagctga agcatgttca tgcaaaaagt gaaccaagta aacctgcccg gagactttca 2040
gagtcctttgc atgtagtgtga cgaaaacaaa aatgaatcca aattagaaag agaacataaa 2100
agacgggacat ctacccctgt tatcatggag ggggtacagg aagagactga cacaagagat 2160
gtaaaaaggc aagtagaacg ctcagaaatt tgcaccgaag agccccagaa acagaaaagc 2220
acacttaaaa acgaaaagca tctaagaaa gatgattctg aaacaccaca tttgaaaagc 2280
ctacttaaga aagaggtgaa atcctccaag gagaagcctg aaagagagaa aactccatcg 2340
gaagacaat tgtctgtgaa acataaatat aaagggtgatt gtatgcataa aacaggtgat 2400
gagactgagc ttcactcttc tgagaaagggt ttaaaagtag agggaaaatat tcaaaagcaa 2460
agtcaacaaa caaagctttc ttcagatgat aaaaccgaac gaaaagtaa acataggaat 2520
gaaaggaaat tatcagtatt aggcacaagat ggaaagccag tttctgaata tattataaaa 2580
acagatgaga atgttcgtaa agaaaaaaaaa
2610

```

```

<210> 2915
<211> 279
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (86)..(118)
<223> n i s a, c, g, t o r u

```

```

<400> 2915
gcagggtacta gcttcaactc tctaaataaa ttccaaggct ttgtgaaaat aacctctctt 60
ctcattcaag ggtatgttta ctggtnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnac 120
tgtaaaagga tagtgtttgc atctagagga ctgagagacat gcctgcacat ccttcacett 180
caaagggtgaa ctctacacag gattcttctc ctagtcatgg tggcaacccc atctgacacc 240
ttgtgtagta cctcgccgc gaccacgcta atcactagt
279

```

```

<210> 2916
<211> 1082
<212> DNA
<213> Homo sapiens

```

```

<400> 2916
gatcccagac ctgcgcttgc agtagtgta gactgaagat aaagtaagtg ctgtttgggc 60
taacaggatc tcctcttgca gtctgcagcc caggacgctg attccagcag cgccttaccg 120
cgcagcccga agattcacta tgggtgaaaat cgccttcaat acccctaccg ccgtgcaaaa 180
ggaggaggcg cggcaagacg tggaggccct cctgagccgc acggtcagaa ctcatagat 240
gaccggcaag gagctccgag ttgccacca ggaaaaagag ggctcctctg ggagatgtat 300

```

```

gcttactctc ttaggccttt cattcatctt ggcaggactt attgttggg gagcctgcat 360
ttacaagtac ttcatgcccc agagcaccat ttaccgtgga gagatgtgct tttttgatctc 420
tgaggatcct gcaaatctcc ttcgtggagg agagcctaac ttcctgcctg tgactgagga 480
ggctgacatt cgtgaggatg acaacattgc aatcattgat gtgcctgtcc ccagtttctc 540
tgatagtgc cctgcagcaa ttattcatga ctttgaaaag ggaatgactg cttacctgga 600
cttggtgctg gggaaactgct atctgatgcc cctcaatact tctattgtta tgcctccaaa 660
aaatctggta gagctctttg gcaaactggc gagtggcaga tatctgcctc aaacttatgt 720
ggtcgcagaa gacctagtgt ctgtggagga aattcgtgat gttagtaacc ttggcatctt 780
tatttaccaa ctttgcaata acagaaagtc cttccgcctt cgtcgcagag acctcttgct 840
gggtttcaac aaacgtgcca ttgataaatg ctggaagatt agacacttcc ccaacgaatt 900
tattgttgag accaagatct gtcaagagta agaggcaaca gatagagtgt ccttggtaat 960
aagaagtcag agatttacaa tatgacttta acattaaggt ttatgggata ctcaagatat 1020
ttactcatgc atttactcta ttgcttatgc cgtaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aa 1082

```

```

<210> 2917
<211> 610
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature
<222> (605)..(605)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature
<222> (608)..(608)
<223> n is a, c, g, t or u

```

```

<400> 2917
aattctnnaa ctcaataaaa agcagggaaa tatgtcagct aattaaataaa aaacggcaac 60
ttgaacaata cttgtctctc agtaaatagt aaagaccatc acaaaataaa aggtattctt 120
atttgttatt atttaataga agacacattc tctgggtccat ttatatcctg tatacaaaatt 180
aacttathtt gattgtatcc atgcaatcta agacaataaa aatagaagaa aaaacagcca 240
cataaacagc aaagtgttat tactgattta attgaattga tttgacattt tcagtccact 300

```

gatatatattc ctgagataaa agttgccctt agtattcatg aatctgtagt tcattcttag 360
 taattttaac atgaaaaatt gatgtgttta aattttcact ttaatatcca tgttttctat 420
 aaaaatttgt aaaattctaa gatattatgg ttatacatat ttattactat tattacatat 480
 taatgtgaat ttgagaaac ttccctttgc atgattttct caaattacaa aatataattat 540
 tctcttataa aggacagcaa gtttaaaatg gagcaaggag cattggaaat atatttaaag 600
 ggaangangg 610

<210> 2918
 <211> 1679
 <212> DNA
 <213> Homo sapiens

<400> 2918
 gtttgttggc tgcggcagca ggtagcaaag tgacgccgag ggctgagtg ctccagtagc 60
 caccgcacat ggagaaccag cggttacat ggaggggatc agtatataca ctccagataa 120
 ctacaccgag gaaatgggct caggggacta tgactccatg aaggaacctt gtttccgtga 180
 agaaaatgct aatttcaata aaatcttcct gccaccatc tactccatca tcttcttaac 240
 tggcattgtg ggcaatggat tggatcatcct ggtcatgggt taccagaaga aactgagaag 300
 catgacggac aagtacaggc tgcacctgtc agtggccgac ctccctcttg tcatcacgct 360
 tccctcttgg cgagtgtgat ccgtggcaaa ctggtacttt gggaaacttc tatgcaaggc 420
 agtccatgtc atctacacag tcaacctcta cagcagtgct ctcatcctgg ccttcacatcag 480
 tctggaccgc tacctggcca tctgtccacg caccaacagt cagaggccaa ggaagctgtt 540
 ggctgaaaaa gtggtctatg ttggcgtctg gatccctgcc ctctctgtga ctattccga 600
 ctctcatctt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctaccc 660
 caatgacttg tgggtgggtg tgttccagtt tcagcacatc atgggtggcc ttatcctgcc 720
 tggatattgt atcctgtcct gctattgcat tatcatctcc aagctgtcac actccaaggg 780
 ccaccagaag cgcaaggccc tcaagaccac agtcacctcc atcctggctt tcttcgcttg 840
 ttggctgcct tactacattg ggatcagcat cgactccttc atcctcctgg aaatcatcaa 900
 gcaaggggtg gagtttgaga aactgtgca caagtggatt tccatcaccg aggccctagc 960
 tttcttccac tgttgtctga accccatcct ctatgctttc ctggagcca aatttaaaac 1020
 ctctgcccg cagcactca cctctgtgag cagagggtcc agcctcaaga tctctccaa 1080
 aggaagcgca ggtggacatt catctgttcc cactgagtct gagtcttcaa gttttcactc 1140
 cagctaacac agatgtaaaa gacttttttt tatacgataa ataacttttt tttaagttac 1200
 acatttttca gatataaaag actgaccaat attgtacagt ttttattgct tgttggattt 1260

ttgtcttgtg tttctttagt ttttgtgaag ttttaattgac ttattttatat aaatTTTTTT	1320
tgtttcatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgctgtatgt	1380
ctcgtgtag gactgtagaa aagggaactg aacattccag agcgtgtagt gaatcacgta	1440
aagctagaaa tgatccccag ctgtttatgc atagataate tctccattcc cgtggaacgt	1500
ttttcctggt ctttaagacgt gattttgctg tagaagatgg cacttataac caaagccaa	1560
agtggatatg aaatgctggt ttttcagttt tcaggagtgg gttgatttca gcacctacag	1620
tgtagactct tgtattaagt tgtaataaaa agtacatgtt aaacttactt agtgttatg	1679

<210> 2919

<211> 2232

<212> DNA

<213> Homo sapiens

<400> 2919

cttccccctt tctgccctgc tccaggcacc aggctctttc cccttcagtg tctcagagga	60
ggggacggca gcaccatgga cccccgcttg tccactgtcc gccagacctg ctgctgcttc	120
aatgtccgca tcgcaaccac gcgccctggcc atctaccatg tgatcatgag cgtcttggtg	180
ttcatcgagc actcagtaga ggtggcccat ggcaaggcgt cctgcaagct ctcccagatg	240
ggctacctca ggatcgctga cctgatctcc agcttctctg tcatcaccat gctcttcate	300
atcagcctga gcctactgat cggcgtagtc aagaaccggg agaagtacct gctgcccttc	360
ctgtccctgc aaatcatgga ctatctctg tgctctgctca ccctgctggg ctctcatatt	420
gagctgcccg cctacctcaa gttggcctcc cggagccgtg ctagetctct caagttcccc	480
ctgatgacgc tgcagctgct ggacttctgc ctgagcatcc tgaccctctg cagctcttac	540
atggaagtgc ccacctatct caacttcaag tccatgaacc acatgaatta cctccccagc	600
caggaggata tgcctcataa ccagttcatc aagatgatga tcatcttttc catgccttc	660
atcactgtcc ttatcttcaa ggtctacatg ttcaagtgcg tgtggcggtg ctacagattg	720
atcaagtgca tgaactcggt ggaggagaag agaaactcca agatgtctca gaaggtgggc	780
ctgccgtctc acgaggaagc cctgtctttg ccatcgaaga ccccagaggg gggccagca	840
ccacccccat actcagaggt gtgaccctcg ccaggcccca gcccagtgcc tgggaggggt	900
ggagctgcct cataatctgc ttttttgctt tggaggcccc tgtggcctgg gtgggccttc	960
cgccccctcc ctggcaggac aatctgcttg tgtctccctc gctggcctgc tctctctgca	1020
gggcctgtga gctgctcaca actgggtcaa cgctttaggc tgagtcactc ctccgggtctc	1080
tcataaatc agcccaacaa tgcttggttt atttcaatca gctctgacac ttgttttagac	1140
gattggccat tctaaagttg gtgagtttgt caagcaacta tcgacttgat cagttcagcc	1200

aagcaactga caaatcaaaa acccacttgt cagttcagta aaataatttg gtcaacaac 1260
 agtctattgc attgatttat aaatagttgt cagttcacat agcaatttaa tcaagtaate 1320
 attaattagt taccacctat atataaatat atgtaatcaa tttcttcaaa tagcttgctt 1380
 acatgataat caattagcca accatgagtc atttagaata gtgataaata gaatacacag 1440
 aatagtgatg aaattcaatt taaaaaatca cgttagcctc caaacatttt aattcaaatg 1500
 aacccatcaa ctggatgcca actctggcga atgtaggacc tctgagtggt tgtataattg 1560
 ttaattcaaa tgaatttcatt taaacagtt gacaaactgt cattcaacaa ttagctccag 1620
 gaaaataacag ttatttcacat ataaaacagt cccttcaaac acacaattgt tctgctgaag 1680
 agttgtcatc aacaatccaa tgctcaccta ttcagttgct ctgtgggtcag tgtggctgca 1740
 tagcagtggg ttccatgaaa ggagtcattt tagtgatgag ctgccagtc attcccaggc 1800
 caggctgtcg ctggccatcc attcagtcga ttcagtcata ggcaaatctg ttctgcccga 1860
 ggcttgtggt caagcaaaaa ttcagccctg aaatcaggca catctgtctg ttggactaaa 1920
 cccacaggtt agttcagta aagcaggcaa ccccttctg ggactgacc ctgccactgg 1980
 ggtcatggcg gttgtggcag ctggggagggt ttggcccaaa cagccctcct gtgctgtctt 2040
 ccctgtgtgt cggggctctc cagggaagctg acccagaggt ggagggccag gaggcagggt 2100
 ctctggggac tgtcgggggg tacagaggga gaaggctctg caagagctcc ctggcaatac 2160
 cccctgtgtt aattgctttg tgtgcgacag ggaggaagtt tcaataaagc aacaacaagc 2220
 ttcaaggaaat tc 2232

<210> 2920

<211> 1620

<212> DNA

<213> Homo sapiens

<400> 2920

caaaggactt cctagtgggt gtgaaaggca gcggtggcca cagaggcggc ggagagatgg 60
 ccttcagcgg ttcccaggct ccctacctga gtccagctgt ccccttttct gggactattc 120
 aaggaggtct ccaggacgga cttcagatca ctgtcaatgg gaccgttctc agctccagtg 180
 gaaccagggt tgcgtggaac tttcagactg gcttcagtgg aaatgacatt gccttccact 240
 tcaacctctg gtttgaagat ggagggtagc tgggtgtgcaa cagaggcag aacggaaagt 300
 gggggcccga ggagaggagg acacacatgc ctttccagaa ggggatgccc tttgacctct 360
 gcttctggt gcagagctca gatttcaagg tgatgggtgaa ggggatcctc ttcgtgcagt 420
 acttccaccg cgtgcccttc caccgtgtgg acaccatctt cgtcaatggc tctgtgcagc 480
 tgtcctacat cagcttcag cctcccgcg tgtggcctgc caaccggct cccattacc 540

agacagtcac ccacacagtg cagagcgccc ctggacagat gttctctact cccgccatcc 600
 cacctatgat gtacccccac cccgcctatc cgtatgecttt catcaccacc attctgggag 660
 ggctgtaccc atccaagtcc atcctcctgt caggcactgt cctgcccagt gctcagagggt 720
 tccacatcaa cctgtgctct gggaaccaca tcgccttcca cctgaacctc cgttttgatg 780
 agaatgctgt ggtecgcaac acccagatcg acaactcctg ggggtctgag gagcgaagtc 840
 tgccccgaaa aatgcccttc gtccgtggcc agagcttctc agtgtggatc ttgtgtggag 900
 ctactgcct caaggtggcc gtggatggtc agcactgtt tgaatactac catcgccctga 960
 ggaacctgcc caccatcaac agactggaag tggggggcga catccagctg acccatgtgc 1020
 agacatagcg ggtctctctg ccctggggcc ggggggtggg gtgtggggca gtctgggtcc 1080
 tctcatcctc cccacttccc agggccagcc ttccaaccc tgcctgggat ctgggcttta 1140
 atgcagaggc catgtccttg tctggtcctg cttctggcta cagccaccct ggaacggaga 1200
 aggcagctga cggggattgc ctctctcagc cgcagcagca cctggggctc cagctgctgg 1260
 aatcctacca tcccaggagg caggcacagc cagggagagg ggaggagtgg gcagtgaaga 1320
 tgaagcccca tgctcagtc cctcccatcc cccacgcagc tccaccccag tccaagcca 1380
 ccagctgtct gtcctgggtg ggaggtggcc tcctcagccc ctctctcttg accttaacc 1440
 tcaactctac cttgcacgtg gcaccaaccc ttcaccctc ctggaagca ggcctgatgg 1500
 ctteccactg gcctccacca cctgaccaga gtgttctctt cagaggactg gctcctttcc 1560
 cagtgtcctt aaaataaaga aatgaaaatg cttgttgcca aaaaaaaaaa aaaaaaaaaa 1620

<210> 2921

<211> 916

<212> DNA

<213> Homo sapiens

<400> 2921

acttctcgct cgacacagcc agagctggag gtgggtgcc gccacggagg ggcctgcgga 60
 ccaatggctc tgccttcac cttagggtc gggatgtgc tggccctgcc aggggecttg 120
 ggctcgggtg gcagcgcgga ggacacgtg ggctccagct ctgtcacctg tgtctgctg 180
 ctgctgctgc tctactgct ggccactggc ctactactgg cctggcgccg cctcagccgt 240
 gactcagggg gctactacca cccggcccg ctaggtgccg cgtgtgggg ccgcacgcgg 300
 cgctgctct gggccagccc cccaggtcgc tggctgcagg cccgagctga gctgggtcc 360
 acagacaatg accttgagcg acaggaggat gagcaggaca cagactatga ccacgtcgcg 420
 gatgggtgcc tgcaggtcta ccctggggaa ggcgagcagc aatgtggaga ggcgtccagc 480
 ccagagcagg tccccgtcgg ggctgaggaa gccagagaca gtgacacgga gggcgacctg 540

gtcctcggct ccccaggacc agcagcgcga gggggcagtg ctgaggccct gctgagtgc 600
 ctgcacgct ttgtctggag cgcagcctgg gatgacacgc ccagggcagc tgggggccag 660
 ggctccatg tcaccgcact gtagaggcgc gtcttggtgt cccatccctg tcacagccgc 720
 tcactccccg tgctctgtct tcccaagatg ccatggctgg actggacccc cagcccacat 780
 gaccatgct cagactgtca cccctaccag tcccaagtc catgtgtacc ccgtcacca 840
 cgggaacgac ccccccaac cacaggcatc aggaacatc ttgaaataaa actccttcag 900
 cctgtgaaaa aaaaaa 916

<210> 2922

<211> 1272

<212> DNA

<213> Homo sapiens

<400> 2922

gaattcggcc aaagaggcct atgcttctct gaagacttgc agcaaggctt gctgaggctc 60
 acagaagata gccccagtgt ttggagtggt ttttgaatgt gattctgaga tcagactgac 120
 tgagctggaa tcttggtttt atatcttacc agctacacaa ccttggaagtc ttagaaattt 180
 tttcttttca ataagcagtc atccttactt tccctcaaga tgacaaacag ttcgttcttc 240
 tgcccgattt ataagaatct ggagccattc acgtattttt tttatttagt tttccttggt 300
 ggaattattg gaagtgtgtt tgcaacctgg gcttttatac agaagaatac gaatcacagg 360
 tgtgtgagca tctacttaat taatttgctt acagcagatt tctgcttac tctggcatta 420
 ccagtgaaaa ttgtgttga cttgggtgtg gcaccttgga agctgaagat attccactgc 480
 caagtaacag cctgctcat ctatatcaat atgtatttat caattatctt cttagcattt 540
 gtcagcattg accgctgtct tcagctgaca cacagctgca agatctaccg aatacaagaa 600
 cccggatttg ccaaaatgat atcaaccgtt gtgtggctaa tggctctctt tataatggtg 660
 ccaaatatga tgattcccat caaagacatc aaggaaaagt caaatgtggg ttgataggag 720
 tttaaaaagg aatttggagg aaattggcat ttgctgacaa atttcatatg ttagcaata 780
 tttttaaatt tctcagccat cattttaata tccaattgcc ttgtaattcg acagctctac 840
 agaaacaaag ataatgaaa ttaccctaat gtgaaaaagg ctctcatcaa catactttta 900
 gtgaccacgg gctacatcat atgctttggt ccttaccaca ttgtccgaat cccgtatacc 960
 ctcagccaga cagaagtcac aactgattgc tcaaccagga ttctactctt caagccaaa 1020
 gaggctacac tgctcctggc tgtgtcgaac ctgtgctttg atcctatcct gtactatcac 1080
 ctctcaaaag cattccgctc aaaggctcact gagacttttg cctcacctaa agagaccaag 1140
 gctcagaaa gaaaaattaag atgtgaaatc aatgcataaa agacaggatt ttttgtgcta 1200

ccaattcttg ccttactgga ccataaagtt aattatagct ttgaaagata aaaaaaaaaa 1260
 aaaagcggcc gc 1272

<210> 2923
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 2923
 tttttttttt tttttgtaga gggtcacatc aatccatagg aaaggaaacc tgcttcttct 60
 cacaagggga taacttttgt tttcctcatg agtcaacttg aaggataact ttaaaaaatt 120
 ggtccatgca gcagagttag actccgtctc aaaaaaaaaa aaaaaagggtcc 180
 atgcagaaga ctatcttttt ccaatttcta taagggaact atgtaagtgc actgtagctc 240
 tgggtatcct caaccacag atctggcagg cagcttgtag cccatcttca gaggagggtcc 300
 aagtgtccat tcagactcgg gtatttccac actagctgtc tttgagtcc atcaagtaga 360
 tagagaactt ctgatccaag ggattttata gagattacaa cccctcgtg ccg 413

<210> 2924
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 2924
 tttttttttt tgcttcaatt cttttctata caaccgtggt tctcaaccag gggctcttct 60
 ggtccccagg ggtgctagg tgggtgtctgg gggcatttgt gactgttatg actcagggat 120
 gtcctctggc tggagtgggt ggaggccagg gatgctgac agaaccttgc agtgccagg 180
 acaacccac cccagagaa gaccagccc tgaatgccaa gggggagaga ctctgcctta 240
 attatttga aaaatattgt atctgtctcc tgttgacacc agacactaga aaaaattccc 300
 gatggggtgg atggcagaaa ccaagggggg cccagctcc tgcgattctc ctctctctc 360
 cctccccact cagggtgtgg attacaatgt gtgcagctc ctggaacctc aggaggacag 420
 aggatcatga gacacagat ttcttgggga tctgtggaat ccctaacc ccg 474

<210> 2925
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2925

Met Ser Ser Glu Asn Cys Phe Val Ala Glu Asn Ser Ser Leu His Pro
 1 5 10 15

Glu Ser Gly Gln Glu Asn Asp Ala Thr Ser Pro His Phe Ser Thr Arg
20 25 30

His Glu Gly Ser Phe Gln Val Pro Val Leu Cys Ala Val Met Asn Val
35 40 45

Val Phe Ile Thr Ile Leu Ile Ile Ala Leu Ile Ala Leu Ser Val Gly
50 55 60

Gln Tyr Asn Cys Pro Gly Gln Tyr Thr Phe Ser Met Pro Ser Asp Ser
65 70 75 80

His Val Ser Ser Cys Ser Glu Asp Trp Val Gly Tyr Gln Arg Lys Cys
85 90 95

Tyr Phe Ile Ser Thr Val Lys Arg Ser Trp Thr Ser Ala Gln Asn Ala
100 105 110

Cys Ser Glu His Gly Ala Thr Leu Ala Val Ile Asp Ser Glu Lys Asp
115 120 125

Met Asn Phe Leu Lys Arg Tyr Ala Gly Arg Glu Glu His Trp Val Gly
130 135 140

Leu Lys Lys Glu Pro Gly His Pro Trp Lys Trp Ser Asn Gly Lys Glu
145 150 155 160

Phe Asn Asn Trp Phe Asn Val Thr Gly Ser Asp Lys Cys Val Phe Leu
165 170 175

Lys Asn Thr Glu Val Ser Ser Met Glu Cys Glu Lys Asn Leu Tyr Trp
180 185 190

Ile Cys Asn Lys Pro Tyr Lys
195

<210> 2926

<211> 326

<212> PRT

<213> Homo sapiens

<400> 2926

Met Asp Tyr Ser His Gln Thr Ser Leu Val Pro Cys Gly Gln Asp Lys
1 5 10 15

Tyr Ile Ser Lys Asn Glu Leu Leu Leu His Leu Lys Thr Tyr Asn Leu
20 25 30

Tyr Tyr Glu Gly Gln Asn Leu Gln Leu Arg His Arg Glu Glu Glu Asp
35 40 45

Glu Phe Ile Val Glu Gly Leu Leu Asn Ile Ser Trp Gly Leu Arg Arg
50 55 60

Pro Ile Arg Leu Gln Met Gln Asp Asp Asn Glu Arg Ile Arg Pro Pro
65 70 75 80

Pro Ser Ser Ser Ser Trp His Ser Gly Cys Asn Leu Gly Ala Gln Gly
85 90 95

Thr Thr Leu Lys Pro Leu Thr Val Pro Lys Val Gln Ile Ser Glu Val
100 105 110

Asp Ala Pro Pro Glu Gly Asp Gln Met Pro Ser Ser Thr Asp Ser Arg
115 120 125

Gly Leu Lys Pro Leu Gln Glu Asp Thr Pro Gln Leu Met Arg Thr Arg
130 135 140

Ser Asp Val Gly Val Arg Arg Arg Gly Asn Val Arg Thr Pro Ser Asp
145 150 155 160

Gln Arg Arg Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr
165 170 175

Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn
180 185 190

Val Arg Ile Asn Ser Thr Met Thr Thr Pro Gln Val Leu Lys Leu Leu
195 200 205

Leu Asn Lys Phe Lys Ile Glu Asn Ser Ala Glu Glu Phe Ala Leu Tyr
210 215 220

Val Val His Thr Ser Gly Glu Lys Gln Lys Leu Lys Ala Thr Asp Tyr
225 230 235 240

Pro Leu Ile Ala Arg Ile Leu Gln Gly Pro Cys Glu Gln Ile Ser Lys
245 250 255

Val Phe Leu Met Glu Lys Asp Gln Val Glu Glu Val Thr Tyr Asp Val
260 265 270

Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu Lys Ser Phe Ile Gln
275 280 285

Lys Leu Gln Glu Glu Glu Asp Arg Glu Val Lys Lys Leu Met Arg Lys
290 295 300

Tyr Thr Val Leu Arg Leu Met Ile Arg Gln Arg Leu Glu Glu Ile Ala
305 310 315 320

Glu Thr Pro Ala Thr Ile
325

<210> 2927

<211> 364

<212> PRT

<213> Homo sapiens

<400> 2927

Met Pro Leu Leu Leu Leu Leu Pro Leu Leu Trp Ala Gly Ala Leu Ala
1 5 10 15

Met Asp Pro Asn Phe Trp Leu Gln Val Gln Glu Ser Val Thr Val Gln
20 25 30

Glu Gly Leu Cys Val Leu Val Pro Cys Thr Phe Phe His Pro Ile Pro
35 40 45

Tyr Tyr Asp Lys Asn Ser Pro Val His Gly Tyr Trp Phe Arg Glu Gly
50 55 60

Ala Ile Ile Ser Gly Asp Ser Pro Val Ala Thr Asn Lys Leu Asp Gln
65 70 75 80

Glu Val Gln Glu Glu Thr Gln Gly Arg Phe Arg Leu Leu Gly Asp Pro
85 90 95

Ser Arg Asn Asn Cys Ser Leu Ser Ile Val Asp Ala Arg Arg Arg Asp
100 105 110

Asn Gly Ser Tyr Phe Phe Arg Met Glu Arg Gly Ser Thr Lys Tyr Ser
115 120 125

Tyr Lys Ser Pro Gln Leu Ser Val His Val Thr Asp Leu Thr His Arg
130 135 140

Pro Lys Ile Leu Ile Pro Gly Thr Leu Glu Pro Gly His Ser Lys Asn

145 150 155 160
 Leu Thr Cys Ser Val Ser Trp Ala Cys Glu Gln Gly Thr Pro Pro Ile
 165 170 175
 Phe Ser Trp Leu Ser Ala Ala Pro Thr Ser Leu Gly Pro Arg Thr Thr
 180 185 190
 His Ser Ser Val Leu Ile Ile Thr Pro Arg Pro Gln Asp His Gly Thr
 195 200 205
 Asn Leu Thr Cys Gln Val Lys Phe Ala Gly Ala Gly Val Thr Thr Glu
 210 215 220
 Arg Thr Ile Gln Leu Asn Val Thr Tyr Val Pro Gln Asn Pro Thr Thr
 225 230 235 240
 Gly Ile Phe Pro Gly Asp Gly Ser Gly Lys Gln Glu Thr Arg Ala Gly
 245 250 255
 Leu Val His Gly Ala Ile Gly Gly Ala Gly Val Thr Ala Leu Leu Ala
 260 265 270
 Leu Cys Leu Cys Leu Ile Phe Phe Ile Val Lys Thr His Arg Arg Lys
 275 280 285
 Ala Ala Arg Thr Ala Val Gly Ser Asn Asp Thr His Pro Thr Thr Gly
 290 295 300
 Ser Ala Ser Pro Lys His Gln Lys Asn Ser Lys Leu His Gly Pro Thr
 305 310 315 320
 Glu Thr Ser Ser Cys Ser Gly Ala Ala Pro Thr Val Glu Met Asp Glu
 325 330 335
 Glu Leu His Tyr Ala Ser Leu Asn Phe His Gly Met Asn Pro Ser Lys
 340 345 350
 Asp Thr Ser Thr Glu Tyr Ser Glu Val Arg Thr Gln
 355 360

<210> 2928
 <211> 326
 <212> PRT
 <213> Homo sapiens
 <400> 2928

Met Asp Tyr Ser His Gln Thr Ser Leu Val Pro Cys Gly Gln Asp Lys
 1 5 10 15

Tyr Ile Ser Lys Asn Glu Leu Leu Leu His Leu Lys Thr Tyr Asn Leu
 20 25 30

Tyr Tyr Glu Gly Gln Asn Leu Gln Leu Arg His Arg Glu Glu Glu Asp
 35 40 45

Glu Phe Ile Val Glu Gly Leu Leu Asn Ile Ser Trp Gly Leu Arg Arg
 50 55 60

Pro Ile Arg Leu Gln Met Gln Asp Asp Asn Glu Arg Ile Arg Pro Pro
 65 70 75 80

Pro Ser Ser Ser Ser Trp His Ser Gly Cys Asn Leu Gly Ala Gln Gly
 85 90 95

Thr Thr Leu Lys Pro Leu Thr Val Pro Lys Val Gln Ile Ser Glu Val
 100 105 110

Asp Ala Pro Pro Glu Gly Asp Gln Met Pro Ser Ser Thr Asp Ser Arg
 115 120 125

Gly Leu Lys Pro Leu Gln Glu Asp Thr Pro Gln Leu Met Arg Thr Arg
 130 135 140

Ser Asp Val Gly Val Arg Arg Arg Gly Asn Val Arg Thr Pro Ser Asp
 145 150 155 160

Gln Arg Arg Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr
 165 170 175

Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn
 180 185 190

Val Arg Ile Asn Ser Thr Met Thr Thr Pro Gln Val Leu Lys Leu Leu
 195 200 205

Leu Asn Lys Phe Lys Ile Glu Asn Ser Ala Glu Glu Phe Ala Leu Tyr
 210 215 220

Val Val His Thr Ser Gly Glu Lys Gln Lys Leu Lys Ala Thr Asp Tyr
 225 230 235 240

Pro Leu Ile Ala Arg Ile Leu Gln Gly Pro Cys Glu Gln Ile Ser Lys
245 250 255

Val Phe Leu Met Glu Lys Asp Gln Val Glu Val Thr Tyr Asp Val
260 265 270

Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu Lys Ser Phe Ile Gln
275 280 285

Lys Leu Gln Glu Glu Glu Asp Arg Glu Val Lys Lys Leu Met Arg Lys
290 295 300

Tyr Thr Val Leu Arg Leu Met Ile Arg Gln Arg Leu Glu Glu Ile Ala
305 310 315 320

Glu Thr Pro Ala Thr Ile
325

<210> 2929

<211> 1842

<212> PRT

<213> Homo sapiens

<400> 2929

Leu Pro His Gly Arg Thr Arg Gly Pro Gly Pro Ala Met Ala Pro Trp
1 5 10 15

Arg Lys Ala Asp Lys Glu Arg His Gly Val Ala Ile Tyr Asn Phe Gln
20 25 30

Gly Ser Gly Ala Pro Gln Leu Ser Leu Gln Ile Gly Asp Val Val Arg
35 40 45

Ile Gln Glu Thr Cys Gly Asp Trp Tyr Arg Gly Tyr Leu Ile Lys His
50 55 60

Lys Met Leu Gln Gly Ile Phe Pro Lys Ser Phe Ile His Ile Lys Glu
65 70 75 80

Val Thr Val Glu Lys Arg Arg Asn Thr Glu Asn Ile Ile Pro Ala Glu
85 90 95

Ile Pro Leu Ala Gln Glu Val Thr Thr Thr Leu Trp Glu Trp Gly Ser
100 105 110

Ile Trp Lys Gln Leu Tyr Val Ala Ser Lys Lys Glu Arg Phe Leu Gln
115 120 125

Val Gln Ser Met Met Tyr Asp Leu Met Glu Trp Arg Ser Gln Leu Leu
130 135 140

Ser Gly Thr Leu Pro Lys Asp Glu Leu Lys Glu Leu Lys Gln Lys Val
145 150 155 160

Thr Ser Lys Ile Asp Tyr Gly Asn Lys Ile Leu Glu Leu Asp Leu Ile
165 170 175

Val Arg Asp Glu Asp Gly Asn Ile Leu Asp Pro Asp Asn Thr Ser Val
180 185 190

Ile Ser Leu Phe His Ala His Glu Glu Ala Thr Asp Lys Ile Thr Glu
195 200 205

Arg Ile Lys Glu Glu Met Ser Lys Asp Gln Pro Asp Tyr Ala Met Tyr
210 215 220

Ser Arg Ile Ser Ser Ser Pro Thr His Ser Leu Tyr Val Phe Val Arg
225 230 235 240

Asn Phe Val Cys Arg Ile Gly Glu Asp Ala Glu Leu Phe Met Ser Leu
245 250 255

Tyr Asp Pro Asn Lys Gln Thr Val Ile Ser Glu Asn Tyr Leu Val Arg
260 265 270

Trp Gly Ser Arg Gly Phe Pro Lys Glu Ile Glu Met Leu Asn Asn Leu
275 280 285

Lys Val Val Phe Thr Asp Leu Gly Asn Lys Asp Leu Asn Arg Asp Lys
290 295 300

Ile Tyr Leu Ile Cys Gln Ile Val Arg Val Gly Lys Met Asp Leu Lys
305 310 315 320

Asp Thr Gly Ala Lys Lys Cys Thr Gln Gly Leu Arg Arg Pro Phe Gly
325 330 335

Val Ala Val Met Asp Ile Thr Asp Ile Ile Lys Gly Lys Ala Glu Ser
340 345 350

Asp Glu Glu Lys Gln His Phe Ile Pro Phe His Pro Val Thr Ala Glu
355 360 365

Asn Asp Phe Leu His Ser Leu Leu Gly Lys Val Ile Ala Ser Lys Gly
 370 375 380

Asp Ser Gly Gly Gln Gly Leu Trp Val Thr Met Lys Met Leu Val Gly
 385 390 395 400

Asp Ile Ile Gln Ile Arg Lys Asp Tyr Pro His Leu Val Asp Arg Thr
 405 410 415

Thr Val Val Ala Arg Lys Leu Gly Phe Pro Glu Ile Ile Met Pro Gly
 420 425 430

Asp Val Arg Asn Asp Ile Tyr Ile Thr Leu Leu Gln Gly Asp Phe Asp
 435 440 445

Lys Tyr Asn Lys Thr Thr Gln Arg Asn Val Glu Val Ile Met Cys Val
 450 455 460

Cys Ala Glu Asp Gly Lys Thr Leu Pro Asn Ala Ile Cys Val Gly Ala
 465 470 475 480

Gly Asp Lys Pro Met Asn Glu Tyr Arg Ser Val Val Tyr Tyr Gln Val
 485 490 495

Lys Gln Pro Arg Trp Met Glu Thr Val Lys Val Ala Val Pro Ile Glu
 500 505 510

Asp Met Gln Arg Ile His Leu Arg Phe Met Phe Arg His Arg Ser Ser
 515 520 525

Leu Glu Ser Lys Asp Lys Gly Glu Lys Asn Phe Ala Met Ser Tyr Val
 530 535 540

Lys Leu Met Lys Glu Asp Gly Thr Thr Leu His Asp Gly Phe His Asp
 545 550 555 560

Leu Val Val Leu Lys Gly Asp Ser Lys Lys Met Glu Asp Ala Ser Ala
 565 570 575

Tyr Leu Thr Leu Pro Ser Tyr Arg His His Val Glu Asn Lys Gly Ala
 580 585 590

Thr Leu Ser Arg Ser Ser Ser Ser Val Gly Gly Leu Ser Val Ser Ser
 595 600 605

Arg Asp Val Phe Ser Ile Ser Thr Leu Val Cys Ser Thr Lys Leu Thr
 610 615 620

Gln Asn Val Gly Leu Leu Gly Leu Leu Lys Trp Arg Met Lys Pro Gln
 625 630 635 640

Leu Leu Gln Glu Asn Leu Glu Lys Leu Lys Ile Val Asp Gly Glu Glu
 645 650 655

Val Val Lys Phe Leu Gln Asp Thr Leu Asp Ala Leu Phe Asn Ile Met
 660 665 670

Met Glu His Ser Gln Ser Asp Glu Tyr Asp Ile Leu Val Phe Asp Ala
 675 680 685

Leu Ile Tyr Ile Ile Gly Leu Ile Ala Asp Arg Lys Phe Gln His Phe
 690 695 700

Asn Thr Val Leu Glu Ala Tyr Ile Gln Gln His Phe Ser Ala Thr Leu
 705 710 715 720

Ala Tyr Lys Lys Leu Met Thr Val Leu Lys Thr Tyr Leu Asp Thr Ser
 725 730 735

Ser Arg Gly Glu Gln Cys Glu Pro Ile Leu Arg Thr Leu Lys Ala Leu
 740 745 750

Glu Tyr Val Phe Lys Phe Ile Val Arg Ser Arg Thr Leu Phe Ser Gln
 755 760 765

Leu Tyr Glu Gly Lys Glu Gln Met Glu Phe Glu Glu Ser Met Arg Arg
 770 775 780

Leu Phe Glu Ser Ile Asn Asn Leu Met Lys Ser Gln Tyr Lys Thr Thr
 785 790 795 800

Ile Leu Leu Gln Val Ala Ala Leu Lys Tyr Ile Pro Ser Val Leu His
 805 810 815

Asp Val Glu Met Val Phe Asp Ala Lys Leu Leu Ser Gln Leu Leu Tyr
 820 825 830

Glu Phe Tyr Thr Cys Ile Pro Pro Val Lys Leu Gln Lys Gln Lys Val
 835 840 845

Gln Ser Met Asn Glu Ile Val Gln Ser Asn Leu Phe Lys Lys Gln Glu

850

855

860

Cys Arg Asp Ile Leu Leu Pro Val Ile Thr Lys Glu Leu Lys Glu Leu
 865 870 875 880

Leu Glu Gln Lys Asp Asp Met Gln His Gln Val Leu Glu Arg Lys Tyr
 885 890 895

Cys Val Glu Leu Leu Asn Ser Ile Leu Glu Val Leu Ser Tyr Gln Asp
 900 905 910

Ala Ala Phe Thr Tyr His His Ile Gln Glu Ile Met Val Gln Leu Leu
 915 920 925

Arg Thr Val Asn Arg Thr Val Ile Thr Met Gly Arg Asp His Ile Leu
 930 935 940

Ile Ser His Phe Val Ala Cys Met Thr Ala Ile Leu Asn Gln Met Gly
 945 950 955 960

Asp Gln His Tyr Ser Phe Tyr Ile Glu Thr Phe Gln Thr Ser Ser Glu
 965 970 975

Leu Val Asp Phe Leu Met Glu Thr Phe Ile Met Phe Lys Asp Leu Ile
 980 985 990

Gly Lys Asn Val Tyr Pro Gly Asp Trp Met Ala Met Ser Met Val Gln
 995 1000 1005

Asn Arg Val Phe Leu Arg Ala Ile Asn Lys Phe Ala Glu Thr Met
 1010 1015 1020

Asn Gln Lys Phe Leu Glu His Thr Asn Phe Glu Phe Gln Leu Trp
 1025 1030 1035

Asn Asn Tyr Phe His Leu Ala Val Ala Phe Ile Thr Gln Asp Ser
 1040 1045 1050

Leu Gln Leu Glu Gln Phe Ser His Ala Lys Tyr Asn Lys Ile Leu
 1055 1060 1065

Asn Lys Tyr Gly Asp Met Arg Arg Leu Ile Gly Phe Ser Ile Arg
 1070 1075 1080

Asp Met Trp Tyr Lys Leu Gly Gln Asn Lys Ile Cys Phe Ile Pro
 1085 1090 1095

Gly Met	Val Gly	Pro Ile	Leu	Glu Met	Thr Leu	Ile	Pro Glu	Ala
1100			1105			1110		
Glu Leu	Arg Lys	Ala Thr	Ile	Pro Ile	Phe Phe	Asp	Met Met	Leu
1115			1120			1125		
Cys Glu	Tyr Gln	Arg Ser	Gly	Asp Phe	Lys Lys	Phe	Glu Asn	Glu
1130			1135			1140		
Ile Ile	Leu Lys	Leu Asp	His	Glu Val	Glu Gly	Gly	Arg Gly	Asp
1145			1150			1155		
Glu Gln	Tyr Met	Gln Leu	Leu	Glu Ser	Ile Leu	Met	Glu Cys	Ala
1160			1165			1170		
Ala Glu	His Pro	Thr Ile	Ala	Lys Ser	Val Glu	Asn	Phe Val	Asn
1175			1180			1185		
Leu Val	Lys Gly	Leu Leu	Glu	Lys Leu	Leu Asp	Tyr	Arg Gly	Val
1190			1195			1200		
Met Thr	Asp Glu	Ser Lys	Asp	Asn Arg	Met Ser	Cys	Thr Val	Asn
1205			1210			1215		
Leu Leu	Asn Phe	Tyr Lys	Asp	Asn Asn	Arg Glu	Glu	Met Tyr	Ile
1220			1225			1230		
Arg Tyr	Leu Tyr	Lys Leu	Arg	Asp Leu	His Leu	Asp	Cys Asp	Asn
1235			1240			1245		
Tyr Thr	Glu Ala	Ala Tyr	Thr	Leu Leu	Leu His	Thr	Trp Leu	Leu
1250			1255			1260		
Lys Trp	Ser Asp	Glu Gln	Cys	Ala Ser	Gln Val	Met	Gln Thr	Gly
1265			1270			1275		
Gln Gln	His Pro	Gln Thr	His	Arg Gln	Leu Lys	Glu	Thr Leu	Tyr
1280			1285			1290		
Glu Thr	Ile Ile	Gly Tyr	Phe	Asp Lys	Gly Lys	Met	Trp Glu	Glu
1295			1300			1305		
Ala Ile	Ser Leu	Cys Lys	Glu	Leu Ala	Glu Gln	Tyr	Glu Met	Glu
1310			1315			1320		

Ile Phe Asp Tyr Glu Leu Leu Ser Gln Asn Leu Ile Gln Gln Ala	1325	1330	1335
Lys Phe Tyr Glu Ser Ile Met Lys Ile Leu Arg Pro Lys Pro Asp	1340	1345	1350
Tyr Phe Ala Val Gly Tyr Tyr Gly Gln Gly Phe Pro Ser Phe Leu	1355	1360	1365
Arg Asn Lys Val Phe Ile Tyr Arg Gly Lys Glu Tyr Glu Arg Arg	1370	1375	1380
Glu Asp Phe Gln Met Gln Leu Met Thr Gln Phe Pro Asn Ala Glu	1385	1390	1395
Lys Met Asn Thr Thr Ser Ala Pro Gly Asp Asp Val Lys Asn Ala	1400	1405	1410
Pro Gly Gln Tyr Ile Gln Cys Phe Thr Val Gln Pro Val Leu Asp	1415	1420	1425
Glu His Pro Arg Phe Lys Asn Lys Pro Val Pro Asp Gln Ile Ile	1430	1435	1440
Asn Phe Tyr Lys Ser Asn Tyr Val Gln Arg Phe His Tyr Ser Arg	1445	1450	1455
Pro Val Arg Arg Gly Thr Val Asp Pro Glu Asn Glu Phe Ala Ser	1460	1465	1470
Met Trp Ile Glu Arg Thr Ser Phe Val Thr Ala Tyr Lys Leu Pro	1475	1480	1485
Gly Ile Leu Arg Trp Phe Glu Val Val His Met Ser Gln Thr Thr	1490	1495	1500
Ile Ser Pro Leu Glu Asn Ala Ile Glu Thr Met Ser Thr Ala Asn	1505	1510	1515
Glu Lys Ile Leu Met Met Ile Asn Gln Tyr Gln Ser Asp Glu Thr	1520	1525	1530
Leu Pro Ile Asn Pro Leu Ser Met Leu Leu Asn Gly Ile Val Asp	1535	1540	1545

Pro Ala	Val Met Gly Gly	Phe	Ala Lys Tyr Glu Lys	Ala Phe Phe
1550		1555		1560
Thr Glu	Glu Tyr Val Arg Asp	His Pro Glu Asp Gln	Asp Lys Leu	
1565		1570	1575	
Thr His	Leu Lys Asp Leu Ile	Ala Trp Gln Ile Pro	Phe Leu Gly	
1580		1585	1590	
Ala Gly	Ile Lys Ile His Glu	Lys Arg Val Ser Asp	Asn Leu Arg	
1595		1600	1605	
Pro Phe	His Asp Arg Met Glu	Glu Cys Phe Lys Asn	Leu Lys Met	
1610		1615	1620	
Lys Val	Glu Lys Glu Tyr Gly	Val Arg Glu Met Pro	Asp Phe Asp	
1625		1630	1635	
Asp Arg	Arg Val Gly Arg Pro	Arg Ser Met Leu Arg	Ser Tyr Arg	
1640		1645	1650	
Gln Met	Ser Ile Ile Ser Leu	Ala Ser Met Asn Ser	Asp Cys Ser	
1655		1660	1665	
Thr Pro	Ser Lys Pro Thr Ser	Glu Ser Phe Asp Leu	Glu Leu Ala	
1670		1675	1680	
Ser Pro	Lys Thr Pro Arg Val	Glu Gln Glu Glu Pro	Ile Ser Pro	
1685		1690	1695	
Gly Ser	Thr Leu Pro Glu Val	Lys Leu Arg Arg Ser	Lys Lys Arg	
1700		1705	1710	
Thr Lys	Arg Ser Ser Val Val	Phe Ala Asp Glu Lys	Ala Ala Ala	
1715		1720	1725	
Glu Ser	Asp Leu Lys Arg Leu	Ser Arg Lys His Glu	Phe Met Ser	
1730		1735	1740	
Asp Thr	Asn Leu Ser Glu His	Ala Ala Ile Pro Leu	Lys Ala Ser	
1745		1750	1755	
Val Leu	Ser Gln Met Ser Phe	Ala Ser Gln Ser Met	Pro Thr Ile	
1760		1765	1770	
Pro Ala	Leu Ala Leu Ser Val	Ala Gly Ile Pro Gly	Leu Asp Glu	

1775 1780 1785

Ala Asn Thr Ser Pro Arg Leu Ser Gln Thr Phe Leu Gln Leu Ser
1790 1795 1800

Asp Gly Asp Lys Lys Thr Leu Thr Arg Lys Lys Val Asn Gln Phe
1805 1810 1815

Phe Lys Thr Met Leu Ala Ser Lys Ser Ala Glu Glu Gly Lys Gln
1820 1825 1830

Ile Pro Asp Ser Leu Ser Thr Asp Leu
1835 1840

<210> 2930
<211> 386
<212> PRT
<213> Homo sapiens

<400> 2930

Met Glu Glu Leu Asp Ala Leu Leu Glu Glu Leu Glu Arg Ser Thr Leu
1 5 10 15

Gln Asp Ser Asp Glu Tyr Ser Asn Pro Ala Pro Leu Pro Leu Asp Gln
20 25 30

His Ser Arg Lys Glu Thr Asn Leu Asp Glu Thr Ser Glu Ile Leu Ser
35 40 45

Ile Gln Asp Asn Thr Ser Pro Leu Pro Ala Gln Leu Val Tyr Thr Thr
50 55 60

Asn Ile Gln Glu Leu Asn Val Tyr Ser Glu Ala Gln Glu Pro Lys Glu
65 70 75 80

Ser Pro Pro Pro Ser Lys Thr Ser Ala Ala Ala Gln Leu Asp Glu Leu
85 90 95

Met Ala His Leu Thr Glu Met Gln Ala Lys Val Ala Val Arg Ala Asp
100 105 110

Ala Gly Lys Lys His Leu Pro Asp Lys Gln Asp His Lys Ala Ser Leu
115 120 125

Asp Ser Met Leu Gly Gly Leu Glu Gln Glu Leu Gln Asp Leu Gly Ile
130 135 140

Ala Thr Val Pro Lys Gly His Cys Ala Ser Cys Gln Lys Pro Ile Ala
 145 150 155 160

Gly Lys Val Ile His Ala Leu Gly Gln Ser Trp His Pro Glu His Phe
 165 170 175

Val Cys Thr His Cys Lys Glu Glu Ile Gly Ser Ser Pro Phe Phe Glu
 180 185 190

Arg Ser Gly Leu Ala Tyr Cys Pro Asn Asp Tyr His Gln Leu Phe Ser
 195 200 205

Pro Arg Cys Ala Tyr Cys Ala Ala Pro Ile Leu Asp Lys Val Leu Thr
 210 215 220

Ala Met Asn Gln Thr Trp His Pro Glu His Phe Phe Cys Ser His Cys
 225 230 235 240

Gly Glu Val Phe Gly Ala Glu Gly Phe His Glu Lys Asp Lys Lys Pro
 245 250 255

Tyr Cys Arg Lys Asp Phe Leu Ala Met Phe Ser Pro Lys Cys Gly Gly
 260 265 270

Cys Asn Arg Pro Val Leu Glu Asn Tyr Leu Ser Ala Met Asp Thr Val
 275 280 285

Trp His Pro Glu Cys Phe Val Cys Gly Asp Cys Phe Thr Ser Phe Ser
 290 295 300

Thr Gly Ser Phe Phe Glu Leu Asp Gly Arg Pro Phe Cys Glu Leu His
 305 310 315 320

Tyr His His Arg Arg Gly Thr Leu Cys His Gly Cys Gly Gln Pro Ile
 325 330 335

Thr Gly Arg Cys Ile Ser Ala Met Gly Tyr Lys Phe His Pro Glu His
 340 345 350

Phe Val Cys Ala Phe Cys Leu Thr Gln Leu Ser Lys Gly Ile Phe Arg
 355 360 365

Glu Gln Asn Asp Lys Thr Tyr Cys Gln Pro Cys Phe Asn Lys Leu Phe
 370 375 380

Pro Leu
385

<210> 2931
<211> 368
<212> PRT
<213> Homo sapiens

<400> 2931

Met Val Leu Glu Val Ser Asp His Gln Val Leu Asn Asp Ala Glu Val
1 5 10 15

Ala Ala Leu Leu Glu Asn Phe Ser Ser Ser Tyr Asp Tyr Gly Glu Asn
20 25 30

Glu Ser Asp Ser Cys Cys Thr Ser Pro Pro Cys Pro Gln Asp Phe Ser
35 40 45

Leu Asn Phe Asp Arg Ala Phe Leu Pro Ala Leu Tyr Ser Leu Leu Phe
50 55 60

Leu Leu Gly Leu Leu Gly Asn Gly Ala Val Ala Ala Val Leu Leu Ser
65 70 75 80

Arg Arg Thr Ala Leu Ser Ser Thr Asp Thr Phe Leu Leu His Leu Ala
85 90 95

Val Ala Asp Thr Leu Leu Val Leu Thr Leu Pro Leu Trp Ala Val Asp
100 105 110

Ala Ala Val Gln Trp Val Phe Gly Ser Gly Leu Cys Lys Val Ala Gly
115 120 125

Ala Leu Phe Asn Ile Asn Phe Tyr Ala Gly Ala Leu Leu Leu Ala Cys
130 135 140

Ile Ser Phe Asp Arg Tyr Leu Asn Ile Val His Ala Thr Gln Leu Tyr
145 150 155 160

Arg Arg Gly Pro Pro Ala Arg Val Thr Leu Thr Cys Leu Ala Val Trp
165 170 175

Gly Leu Cys Leu Leu Phe Ala Leu Pro Asp Phe Ile Phe Leu Ser Ala
180 185 190

His His Asp Glu Arg Leu Asn Ala Thr His Cys Gln Tyr Asn Phe Pro
195 200 205

Gln Val Gly Arg Thr Ala Leu Arg Val Leu Gln Leu Val Ala Gly Phe
 210 215 220

Leu Leu Pro Leu Leu Val Met Ala Tyr Cys Tyr Ala His Ile Leu Ala
 225 230 235 240

Val Leu Leu Val Ser Arg Gly Gln Arg Arg Leu Arg Ala Met Arg Leu
 245 250 255

Val Val Val Val Val Val Ala Phe Ala Leu Cys Trp Thr Pro Tyr His
 260 265 270

Leu Val Val Leu Val Asp Ile Leu Met Asp Leu Gly Ala Leu Ala Arg
 275 280 285

Asn Cys Gly Arg Glu Ser Arg Val Asp Val Ala Lys Ser Val Thr Ser
 290 295 300

Gly Leu Gly Tyr Met His Cys Cys Leu Asn Pro Leu Leu Tyr Ala Phe
 305 310 315 320

Val Gly Val Lys Phe Arg Glu Arg Met Trp Met Leu Leu Leu Arg Leu
 325 330 335

Gly Cys Pro Asn Gln Arg Gly Leu Gln Arg Gln Pro Ser Ser Ser Arg
 340 345 350

Arg Asp Ser Ser Trp Ser Glu Thr Ser Glu Ala Ser Tyr Ser Gly Leu
 355 360 365

<210> 2932

<211> 359

<212> PRT

<213> Homo sapiens

<400> 2932

Met Ala Glu Ala Ile Thr Tyr Ala Asp Leu Arg Phe Val Lys Ala Pro
 1 5 10 15

Leu Lys Lys Ser Ile Ser Ser Arg Leu Gly Gln Asp Pro Gly Ala Asp
 20 25 30

Asp Asp Gly Glu Ile Thr Tyr Glu Asn Val Gln Val Pro Ala Val Leu
 35 40 45

Gly Val Pro Ser Ser Leu Ala Ser Ser Val Leu Gly Asp Lys Ala Ala
 50 55 60

Val Lys Ser Glu Gln Pro Thr Ala Ser Trp Arg Ala Val Thr Ser Pro
 65 70 75 80

Ala Val Gly Arg Ile Leu Pro Cys Arg Thr Thr Cys Leu Arg Tyr Leu
 85 90 95

Leu Leu Gly Leu Leu Leu Thr Cys Leu Leu Leu Gly Val Thr Ala Ile
 100 105 110

Cys Leu Gly Val Arg Tyr Leu Gln Val Ser Gln Gln Leu Gln Gln Thr
 115 120 125

Asn Arg Val Leu Glu Val Thr Asn Ser Ser Leu Arg Gln Gln Leu Arg
 130 135 140

Leu Lys Ile Thr Gln Leu Gly Gln Ser Ala Glu Asp Leu Gln Gly Ser
 145 150 155 160

Arg Arg Glu Leu Ala Gln Ser Gln Glu Ala Leu Gln Val Glu Gln Arg
 165 170 175

Ala His Gln Ala Ala Glu Gly Gln Leu Gln Ala Cys Gln Ala Asp Arg
 180 185 190

Gln Lys Thr Lys Glu Thr Leu Gln Ser Glu Glu Gln Gln Arg Arg Ala
 195 200 205

Leu Glu Gln Lys Leu Ser Asn Met Glu Asn Arg Leu Lys Pro Phe Phe
 210 215 220

Thr Cys Gly Ser Ala Asp Thr Cys Cys Pro Ser Gly Trp Ile Met His
 225 230 235 240

Gln Lys Ser Cys Phe Tyr Ile Ser Leu Thr Ser Lys Asn Trp Gln Glu
 245 250 255

Ser Gln Lys Gln Cys Glu Thr Leu Ser Ser Lys Leu Ala Thr Phe Ser
 260 265 270

Glu Ile Tyr Pro Gln Ser His Ser Tyr Tyr Phe Leu Asn Ser Leu Leu
 275 280 285

Pro Asn Gly Gly Ser Gly Asn Ser Tyr Trp Thr Gly Leu Ser Ser Asn

290

295

300

Lys Asp Trp Lys Leu Thr Asp Asp Thr Gln Arg Thr Arg Thr Tyr Ala
 305 310 315 320

Gln Ser Ser Lys Cys Asn Lys Val His Lys Thr Trp Ser Trp Trp Thr
 325 330 335

Leu Glu Ser Glu Ser Cys Arg Ser Ser Leu Pro Tyr Ile Cys Glu Met
 340 345 350

Thr Ala Phe Arg Phe Pro Asp
 355

<210> 2933

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2933

Met Arg Val Thr Leu Ala Thr Ile Ala Trp Met Val Ser Phe Val Ser
 1 5 10 15

Asn Tyr Ser His Thr Ala Asn Ile Leu Pro Asp Ile Glu Asn Glu Asp
 20 25 30

Phe Ile Lys Asp Cys Val Arg Ile His Asn Lys Phe Arg Ser Glu Val
 35 40 45

Lys Pro Thr Ala Ser Asp Met Leu Tyr Met Thr Trp Asp Pro Ala Leu
 50 55 60

Ala Gln Ile Ala Lys Ala Trp Ala Ser Asn Cys Gln Phe Ser His Asn
 65 70 75 80

Thr Arg Leu Lys Pro Pro His Lys Leu His Pro Asn Phe Thr Ser Leu
 85 90 95

Gly Glu Asn Ile Trp Thr Gly Ser Val Pro Ile Phe Ser Val Ser Ser
 100 105 110

Ala Ile Thr Asn Trp Tyr Asp Glu Ile Gln Asp Tyr Asp Phe Lys Thr
 115 120 125

Arg Ile Cys Lys Lys Val Cys Gly His Tyr Thr Gln Val Val Trp Ala
 130 135 140

Asp Ser Tyr Lys Val Gly Cys Ala Val Gln Phe Cys Pro Lys Val Ser
 145 150 155 160

Gly Phe Asp Ala Leu Ser Asn Gly Ala His Phe Ile Cys Asn Tyr Gly
 165 170 175

Pro Gly Gly Asn Tyr Pro Thr Trp Pro Tyr Lys Arg Gly Ala Thr Cys
 180 185 190

Ser Ala Cys Pro Asn Asn Asp Lys Cys Leu Asp Asn Leu Cys Val Asn
 195 200 205

Arg Gln Arg Asp Gln Val Lys Arg Tyr Tyr Ser Val Val Tyr Pro Gly
 210 215 220

Trp Pro Ile Tyr Pro Arg Asn Arg Tyr Thr Ser Leu Phe Leu Ile Val
 225 230 235 240

Asn Ser Val Ile Leu Ile Leu Ser Val Ile Ile Thr Ile Leu Val Gln
 245 250 255

Leu Lys Tyr Pro Asn Leu Val Leu Leu Asp
 260 265

<210> 2934

<211> 1429

<212> PRT

<213> Homo sapiens

<400> 2934

Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15

Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30

His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45

Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60

Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80

Ser Leu Cys Ala Gln Ala Gln Glu Gly Ala Gly His Ser Pro Ser Phe

	85		90		95
Pro Tyr Ser Pro Ser Glu Pro His Leu Gly Ser Pro Ser Gln Pro Thr	100		105		110
Ser Thr Ala Val Leu Met Pro Trp Ile His Glu Leu Pro Ala Gly Cys	115		120		125
Thr Gln Gly Ser Glu Arg Arg Val Leu Arg Gln Leu Pro Asp Thr Ser	130		135		140
Gly Arg Arg Trp Arg Glu Ile Ser Ala Ser Leu Leu Tyr Gln Ala Leu	145		150		155
Pro Ser Ser Pro Asp His Glu Ser Pro Ser Gln Glu Ser Pro Asn Ala	165		170		175
Pro Thr Ser Thr Ala Val Leu Gly Ser Trp Gly Ser Pro Pro Gln Pro	180		185		190
Ser Leu Ala Pro Arg Glu Gln Glu Ala Pro Gly Thr Gln Trp Pro Leu	195		200		205
Asp Glu Thr Ser Gly Ile Tyr Tyr Thr Glu Ile Arg Glu Arg Glu Arg	210		215		220
Glu Lys Ser Glu Lys Gly Arg Pro Pro Trp Ala Ala Val Val Gly Thr	225		230		235
Pro Pro Gln Ala His Thr Ser Leu Gln Pro His His His Pro Trp Glu	245		250		255
Pro Ser Val Arg Glu Ser Leu Cys Ser Thr Trp Pro Trp Lys Asn Glu	260		265		270
Asp Phe Asn Gln Lys Phe Thr Gln Leu Leu Leu Leu Gln Arg Pro His	275		280		285
Pro Arg Ser Gln Asp Pro Leu Val Lys Arg Ser Trp Pro Asp Tyr Val	290		295		300
Glu Glu Asn Arg Gly His Leu Ile Glu Ile Arg Asp Leu Phe Gly Pro	305		310		315
Gly Leu Asp Thr Gln Glu Pro Arg Ile Val Ile Leu Gln Gly Ala Ala	325		330		335

Gly Ile Gly Lys Ser Thr Leu Ala Arg Gln Val Lys Glu Ala Trp Gly
 340 345 350

Arg Gly Gln Leu Tyr Gly Asp Arg Phe Gln His Val Phe Tyr Phe Ser
 355 360 365

Cys Arg Glu Leu Ala Gln Ser Lys Val Val Ser Leu Ala Glu Leu Ile
 370 375 380

Gly Lys Asp Gly Thr Ala Thr Pro Ala Pro Ile Arg Gln Ile Leu Ser
 385 390 395 400

Arg Pro Glu Arg Leu Leu Phe Ile Leu Asp Gly Val Asp Glu Pro Gly
 405 410 415

Trp Val Leu Gln Glu Pro Ser Ser Glu Leu Cys Leu His Trp Ser Gln
 420 425 430

Pro Gln Pro Ala Asp Ala Leu Leu Gly Ser Leu Leu Gly Lys Thr Ile
 435 440 445

Leu Pro Glu Ala Ser Phe Leu Ile Thr Ala Arg Thr Thr Ala Leu Gln
 450 455 460

Asn Leu Ile Pro Ser Leu Glu Gln Ala Arg Trp Val Glu Val Leu Gly
 465 470 475 480

Phe Ser Glu Ser Ser Arg Lys Glu Tyr Phe Tyr Arg Tyr Phe Thr Asp
 485 490 495

Glu Arg Gln Ala Ile Arg Ala Phe Arg Leu Val Lys Ser Asn Lys Glu
 500 505 510

Leu Trp Ala Leu Cys Leu Val Pro Trp Val Ser Trp Leu Ala Cys Thr
 515 520 525

Cys Leu Met Gln Gln Met Lys Arg Lys Glu Lys Leu Thr Leu Thr Ser
 530 535 540

Lys Thr Thr Thr Thr Leu Cys Leu His Tyr Leu Ala Gln Ala Leu Gln
 545 550 555 560

Ala Gln Pro Leu Gly Pro Gln Leu Arg Asp Leu Cys Ser Leu Ala Ala
 565 570 575

Glu Gly Ile Trp Gln Lys Lys Thr Leu Phe Ser Pro Asp Asp Leu Arg
 580 585 590

Lys His Gly Leu Asp Gly Ala Ile Ile Ser Thr Phe Leu Lys Met Gly
 595 600 605

Ile Leu Gln Glu His Pro Ile Pro Leu Ser Tyr Ser Phe Ile His Leu
 610 615 620

Cys Phe Gln Glu Phe Phe Ala Ala Met Ser Tyr Val Leu Glu Asp Glu
 625 630 635 640

Lys Gly Arg Gly Lys His Ser Asn Cys Ile Ile Asp Leu Glu Lys Thr
 645 650 655

Leu Glu Ala Tyr Gly Ile His Gly Leu Phe Gly Ala Ser Thr Thr Arg
 660 665 670

Phe Leu Leu Gly Leu Leu Ser Asp Glu Gly Glu Arg Glu Met Glu Asn
 675 680 685

Ile Phe His Cys Arg Leu Ser Gln Gly Arg Asn Leu Met Gln Trp Val
 690 695 700

Pro Ser Leu Gln Leu Leu Leu Gln Pro His Ser Leu Glu Ser Leu His
 705 710 715 720

Cys Leu Tyr Glu Thr Arg Asn Lys Thr Phe Leu Thr Gln Val Met Ala
 725 730 735

His Phe Glu Glu Met Gly Met Cys Val Glu Thr Asp Met Glu Leu Leu
 740 745 750

Val Cys Thr Phe Cys Ile Lys Phe Ser Arg His Val Lys Lys Leu Gln
 755 760 765

Leu Ile Glu Gly Arg Gln His Arg Ser Thr Trp Ser Pro Thr Met Val
 770 775 780

Val Leu Phe Arg Trp Val Pro Val Thr Asp Ala Tyr Trp Gln Ile Leu
 785 790 795 800

Phe Ser Val Leu Lys Val Thr Arg Asn Leu Lys Glu Leu Asp Leu Ser
 805 810 815

Gly Asn Ser Leu Ser His Ser Ala Val Lys Ser Leu Cys Lys Thr Leu
820 825 830

Arg Arg Pro Arg Cys Leu Leu Glu Thr Leu Arg Leu Ala Gly Cys Gly
835 840 845

Leu Thr Ala Glu Asp Cys Lys Asp Leu Ala Phe Gly Leu Arg Ala Asn
850 855 860

Gln Thr Leu Thr Glu Leu Asp Leu Ser Phe Asn Val Leu Thr Asp Ala
865 870 875 880

Gly Ala Lys His Leu Cys Gln Arg Leu Arg Gln Pro Ser Cys Lys Leu
885 890 895

Gln Arg Leu Gln Leu Val Ser Cys Gly Leu Thr Ser Asp Cys Cys Gln
900 905 910

Asp Leu Ala Ser Val Leu Ser Ala Ser Pro Ser Leu Lys Glu Leu Asp
915 920 925

Leu Gln Gln Asn Asn Leu Asp Asp Val Gly Val Arg Leu Leu Cys Glu
930 935 940

Gly Leu Arg His Pro Ala Cys Lys Leu Ile Arg Leu Gly Leu Asp Gln
945 950 955 960

Thr Thr Leu Ser Asp Glu Met Arg Gln Glu Leu Arg Ala Leu Glu Gln
965 970 975

Glu Lys Pro Gln Leu Leu Ile Phe Ser Arg Arg Lys Pro Ser Val Met
980 985 990

Thr Pro Thr Glu Gly Leu Asp Thr Gly Glu Met Ser Asn Ser Thr Ser
995 1000 1005

Ser Leu Lys Arg Gln Arg Leu Gly Ser Glu Arg Ala Ala Ser His
1010 1015 1020

Val Ala Gln Ala Asn Leu Lys Leu Leu Asp Val Ser Lys Ile Phe
1025 1030 1035

Pro Ile Ala Glu Ile Ala Glu Glu Ser Ser Pro Glu Val Val Pro
1040 1045 1050

Val Glu Leu Leu Cys Val Pro Ser Pro Ala Ser Gln Gly Asp Leu

1055		1060		1065	
His Thr Lys Pro Leu Gly Thr Asp Asp Asp Phe Trp Gly Pro Thr					
1070		1075		1080	
Gly Pro Val Ala Thr Glu Val Val Asp Lys Glu Lys Asn Leu Tyr					
1085		1090		1095	
Arg Val His Phe Pro Val Ala Gly Ser Tyr Arg Trp Pro Asn Thr					
1100		1105		1110	
Gly Leu Cys Phe Val Met Arg Glu Ala Val Thr Val Glu Ile Glu					
1115		1120		1125	
Phe Cys Val Trp Asp Gln Phe Leu Gly Glu Ile Asn Pro Gln His					
1130		1135		1140	
Ser Trp Met Val Ala Gly Pro Leu Leu Asp Ile Lys Ala Glu Pro					
1145		1150		1155	
Gly Ala Val Glu Ala Val His Leu Pro His Phe Val Ala Leu Gln					
1160		1165		1170	
Gly Gly His Val Asp Thr Ser Leu Phe Gln Met Ala His Phe Lys					
1175		1180		1185	
Glu Glu Gly Met Leu Leu Glu Lys Pro Ala Arg Val Glu Leu His					
1190		1195		1200	
His Ile Val Leu Glu Asn Pro Ser Phe Ser Pro Leu Gly Val Leu					
1205		1210		1215	
Leu Lys Met Ile His Asn Ala Leu Arg Phe Ile Pro Val Thr Ser					
1220		1225		1230	
Val Val Leu Leu Tyr His Arg Val His Pro Glu Glu Val Thr Phe					
1235		1240		1245	
His Leu Tyr Leu Ile Pro Ser Asp Cys Ser Ile Arg Lys Glu Leu					
1250		1255		1260	
Glu Leu Cys Tyr Arg Ser Pro Gly Glu Asp Gln Leu Phe Ser Glu					
1265		1270		1275	
Phe Tyr Val Gly His Leu Gly Ser Gly Ile Arg Leu Gln Val Lys					
1280		1285		1290	

Asp Lys Lys Asp Glu Thr Leu Val Trp Glu Ala Leu Val Lys Pro
1295 1300 1305

Gly Asp Leu Met Pro Ala Thr Thr Leu Ile Pro Pro Ala Arg Ile
1310 1315 1320

Ala Val Pro Ser Pro Leu Asp Ala Pro Gln Leu Leu His Phe Val
1325 1330 1335

Asp Gln Tyr Arg Glu Gln Leu Ile Ala Arg Val Thr Ser Val Glu
1340 1345 1350

Val Val Leu Asp Lys Leu His Gly Gln Val Leu Ser Gln Glu Gln
1355 1360 1365

Tyr Glu Arg Val Leu Ala Glu Asn Thr Arg Pro Ser Gln Met Arg
1370 1375 1380

Lys Leu Phe Ser Leu Ser Gln Ser Trp Asp Arg Lys Cys Lys Asp
1385 1390 1395

Gly Leu Tyr Gln Ala Leu Lys Glu Thr His Pro His Leu Ile Met
1400 1405 1410

Glu Leu Trp Glu Lys Gly Ser Lys Lys Gly Leu Leu Pro Leu Ser
1415 1420 1425

Ser

<210> 2935

<211> 352

<212> PRT

<213> Homo sapiens

<400> 2935

Met Glu Gly Ile Ser Ile Tyr Thr Ser Asp Asn Tyr Thr Glu Glu Met
1 5 10 15

Gly Ser Gly Asp Tyr Asp Ser Met Lys Glu Pro Cys Phe Arg Glu Glu
20 25 30

Asn Ala Asn Phe Asn Lys Ile Phe Leu Pro Thr Ile Tyr Ser Ile Ile
35 40 45

Phe Leu Thr Gly Ile Val Gly Asn Gly Leu Val Ile Leu Val Met Gly
50 55 60

Tyr Gln Lys Lys Leu Arg Ser Met Thr Asp Lys Tyr Arg Leu His Leu
65 70 75 80

Ser Val Ala Asp Leu Leu Phe Val Ile Thr Leu Pro Phe Trp Ala Val
85 90 95

Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
100 105 110

His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
115 120 125

Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
130 135 140

Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
145 150 155 160

Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
165 170 175

Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
180 185 190

Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
195 200 205

Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
210 215 220

Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
225 230 235 240

Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
245 250 255

Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
260 265 270

Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
275 280 285

Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe

```

      290               295               300
Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
305          310          315          320

Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
          325          330          335

His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
          340          345          350

<210>    2936
<211>    248
<212>    PRT
<213>    Homo sapiens

<400>    2936

Met Leu Ser Thr Val Gly Ser Phe Leu Gln Asp Leu Gln Asn Glu Asp
1             5              10             15

Lys Gly Ile Lys Thr Ala Ala Ile Phe Thr Ala Asp Gly Asn Met Ile
          20              25              30

Ser Ala Ser Thr Leu Met Asp Ile Leu Leu Met Asn Asp Phe Lys Leu
          35              40              45

Val Ile Asn Lys Ile Ala Tyr Asp Val Gln Cys Pro Lys Arg Glu Lys
          50              55              60

Pro Ser Asn Glu His Thr Ala Glu Met Glu His Met Lys Ser Leu Val
65          70              75              80

His Arg Leu Phe Thr Ile Leu His Leu Glu Glu Ser Gln Lys Lys Arg
          85              90              95

Glu His His Leu Leu Glu Lys Ile Asp His Leu Lys Glu Gln Leu Gln
          100             105             110

Pro Leu Glu Gln Val Lys Ala Gly Ile Glu Ala His Ser Glu Ala Lys
          115             120             125

Thr Ser Gly Leu Leu Trp Ala Gly Leu Ala Leu Leu Ser Ile Gln Gly
          130             135             140

Gly Ala Leu Ala Trp Leu Thr Trp Trp Val Tyr Ser Trp Asp Ile Met
145          150             155             160

```

Glu Pro Val Thr Tyr Phe Ile Thr Phe Ala Asn Ser Met Val Phe Phe
 165 170 175

Ala Tyr Phe Ile Val Thr Arg Gln Asp Tyr Thr Tyr Ser Ala Val Lys
 180 185 190

Ser Arg Gln Phe Leu Gln Phe Phe His Lys Lys Ser Lys Gln Gln His
 195 200 205

Phe Asp Val Gln Gln Tyr Asn Lys Leu Lys Glu Asp Leu Ala Lys Ala
 210 215 220

Lys Glu Ser Leu Lys Gln Ala Arg His Ser Leu Cys Leu Gln Met Gln
 225 230 235 240

Val Glu Glu Leu Asn Glu Lys Asn
 245

<210> 2937

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2937

Met Ala Glu Gln Val Leu Pro Gln Ala Leu Tyr Leu Ser Asn Met Arg
 1 5 10 15

Lys Ala Val Lys Ile Arg Glu Arg Thr Pro Glu Asp Ile Phe Lys Pro
 20 25 30

Thr Asn Gly Ile Ile His His Phe Lys Thr Met His Arg Tyr Thr Leu
 35 40 45

Glu Met Phe Arg Thr Cys Gln Phe Cys Pro Gln Phe Arg Glu Ile Ile
 50 55 60

His Lys Ala Leu Ile Asp Arg Asn Ile Gln Ala Thr Leu Glu Ser Gln
 65 70 75 80

Lys Lys Leu Asn Trp Cys Arg Glu Val Arg Lys Leu Val Ala Leu Lys
 85 90 95

Thr Asn Gly Asp Gly Asn Cys Leu Met His Ala Thr Ser Gln Tyr Met
 100 105 110

Trp Gly Val Gln Asp Thr Asp Leu Val Leu Arg Lys Ala Leu Phe Ser

115	120	125
Thr Leu Lys Glu Thr Asp Thr Arg Asn Phe Lys Phe Arg Trp Gln Leu 130 135 140		
Glu Ser Leu Lys Ser Gln Glu Phe Val Glu Thr Gly Leu Cys Tyr Asp 145 150 155 160		
Thr Arg Asn Trp Asn Asp Glu Trp Asp Asn Leu Ile Lys Met Ala Ser 165 170 175		
Thr Asp Thr Pro Met Ala Arg Ser Gly Leu Gln Tyr Asn Ser Leu Glu 180 185 190		
Glu Ile His Ile Phe Val Leu Cys Asn Ile Leu Arg Arg Pro Ile Ile 195 200 205		
Val Ile Ser Asp Lys Met Leu Arg Ser Leu Glu Ser Gly Ser Asn Phe 210 215 220		
Ala Pro Leu Lys Val Gly Gly Ile Tyr Leu Pro Leu His Trp Pro Ala 225 230 235 240		
Gln Glu Cys Tyr Arg Tyr Pro Ile Val Leu Gly Tyr Asp Ser His His 245 250 255		
Phe Val Pro Leu Val Thr Leu Lys Asp Ser Gly Pro Glu Ile Arg Ala 260 265 270		
Val Pro Leu Val Asn Arg Asp Arg Gly Arg Phe Glu Asp Leu Lys Val 275 280 285		
His Phe Leu Thr Asp Pro Glu Asn Glu Met Lys Glu Lys Leu Leu Lys 290 295 300		
Glu Tyr Leu Met Val Ile Glu Ile Pro Val Gln Gly Trp Asp His Gly 305 310 315 320		
Thr Thr His Leu Ile Asn Ala Ala Lys Leu Asp Glu Ala Asn Leu Pro 325 330 335		
Lys Glu Ile Asn Leu Val Asp Asp Tyr Phe Glu Leu Val Gln His Glu 340 345 350		
Tyr Lys Lys Trp Gln Glu Asn Ser Glu Gln Gly Arg Arg Glu Gly His 355 360 365		

Ala Gln Asn Pro Met Glu Pro Ser Val Pro Gln Leu Ser Leu Met Asp
 370 375 380

Val Lys Cys Glu Thr Pro Asn Cys Pro Phe Phe Met Ser Val Asn Thr
 385 390 395 400

Gln Pro Leu Cys His Glu Cys Ser Glu Arg Arg Gln Lys Asn Gln Asn
 405 410 415

Lys Leu Pro Lys Leu Asn Ser Lys Pro Gly Pro Glu Gly Leu Pro Gly
 420 425 430

Met Ala Leu Gly Ala Ser Arg Gly Glu Ala Tyr Glu Pro Leu Ala Trp
 435 440 445

Asn Pro Glu Glu Ser Thr Gly Gly Pro His Ser Ala Pro Pro Thr Ala
 450 455 460

Pro Ser Pro Phe Leu Phe Ser Glu Thr Thr Ala Met Lys Cys Arg Ser
 465 470 475 480

Pro Gly Cys Pro Phe Thr Leu Asn Val Gln His Asn Gly Phe Cys Glu
 485 490 495

Arg Cys His Asn Ala Arg Gln Leu His Ala Ser His Ala Pro Asp His
 500 505 510

Thr Arg His Leu Asp Pro Gly Lys Cys Gln Ala Cys Leu Gln Asp Val
 515 520 525

Thr Arg Thr Phe Asn Gly Ile Cys Ser Thr Cys Phe Lys Arg Thr Thr
 530 535 540

Ala Glu Ala Ser Ser Ser Leu Ser Thr Ser Leu Pro Pro Ser Cys His
 545 550 555 560

Gln Arg Ser Lys Ser Asp Pro Ser Arg Leu Val Arg Ser Pro Ser Pro
 565 570 575

His Ser Cys His Arg Ala Gly Asn Asp Ala Pro Ala Gly Cys Leu Ser
 580 585 590

Gln Ala Ala Arg Thr Pro Gly Asp Arg Thr Gly Thr Ser Lys Cys Arg
 595 600 605

Lys Ala Gly Cys Val Tyr Phe Gly Thr Pro Glu Asn Lys Gly Phe Cys
610 615 620

Thr Leu Cys Phe Ile Glu Tyr Arg Glu Asn Lys His Phe Ala Ala Ala
625 630 635 640

Ser Gly Lys Val Ser Pro Thr Ala Ser Arg Phe Gln Asn Thr Ile Pro
645 650 655

Cys Leu Gly Arg Glu Cys Gly Thr Leu Gly Ser Thr Met Phe Glu Gly
660 665 670

Tyr Cys Gln Lys Cys Phe Ile Glu Ala Gln Asn Gln Arg Phe His Glu
675 680 685

Ala Lys Arg Thr Glu Glu Gln Leu Arg Ser Ser Gln Arg Arg Asp Val
690 695 700

Pro Arg Thr Thr Gln Ser Thr Ser Arg Pro Lys Cys Ala Arg Ala Ser
705 710 715 720

Cys Lys Asn Ile Leu Ala Cys Arg Ser Glu Glu Leu Cys Met Glu Cys
725 730 735

Gln His Pro Asn Gln Arg Met Gly Pro Gly Ala His Arg Gly Glu Pro
740 745 750

Ala Pro Glu Asp Pro Pro Lys Gln Arg Cys Arg Ala Pro Ala Cys Asp
755 760 765

His Phe Gly Asn Ala Lys Cys Asn Gly Tyr Cys Asn Glu Cys Phe Gln
770 775 780

Phe Lys Gln Met Tyr Gly
785 790

<210> 2938

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2938

Met Ala Leu Pro Cys Thr Leu Gly Leu Gly Met Leu Leu Ala Leu Pro
1 5 10 15

Gly Ala Leu Gly Ser Gly Gly Ser Ala Glu Asp Ser Val Gly Ser Ser

	20	25	30
Ser Val Thr Val Val Leu Leu Leu Leu Leu Leu Leu Leu Ala Thr	35	40	45
Gly Leu Ala Leu Ala Trp Arg Arg Leu Ser Arg Asp Ser Gly Gly Tyr	50	55	60
Tyr His Pro Ala Arg Leu Gly Ala Ala Leu Trp Gly Arg Thr Arg Arg	65	70	80
Leu Leu Trp Ala Ser Pro Pro Gly Arg Trp Leu Gln Ala Arg Ala Glu	85	90	95
Leu Gly Ser Thr Asp Asn Asp Leu Glu Arg Gln Glu Asp Glu Gln Asp	100	105	110
Thr Asp Tyr Asp His Val Ala Asp Gly Gly Leu Gln Ala Asp Pro Gly	115	120	125
Glu Gly Glu Gln Gln Cys Gly Glu Ala Ser Ser Pro Glu Gln Val Pro	130	135	140
Val Arg Ala Glu Glu Ala Arg Asp Ser Asp Thr Glu Gly Asp Leu Val	145	150	155
Leu Gly Ser Pro Gly Pro Ala Ser Ala Gly Gly Ser Ala Glu Ala Leu	165	170	175
Leu Ser Asp Leu His Ala Phe Ala Gly Ser Ala Ala Trp Asp Asp Ser	180	185	190
Ala Arg Ala Ala Gly Gly Gln Gly Leu His Val Thr Ala Leu	195	200	205
<210> 2939			
<211> 718			
<212> PRT			
<213> Homo sapiens			
<400> 2939			
Met Ile Val Asp Lys Leu Leu Asp Asp Ser Arg Gly Gly Glu Gly Leu	1	5	10
Arg Asp Ala Ala Gly Gly Cys Gly Leu Met Thr Ser Pro Leu Asn Leu	20	25	30

Ser Tyr Phe Tyr Gly Ala Ser Pro Pro Ala Ala Ala Pro Gly Ala Cys
 35 40 45

Asp Ala Ser Cys Ser Val Leu Gly Pro Ser Ala Pro Gly Ser Pro Gly
 50 55 60

Ser Asp Ser Ser Asp Phe Ser Ser Ala Ser Ser Val Ser Ser Cys Gly
 65 70 75 80

Ala Val Glu Ser Arg Ser Arg Gly Gly Ala Arg Ala Glu Arg Gln Pro
 85 90 95

Val Glu Pro His Met Gly Val Gly Arg Gln Gln Arg Gly Pro Phe Gln
 100 105 110

Gly Val Arg Val Lys Asn Ser Val Lys Glu Leu Leu Leu His Ile Arg
 115 120 125

Ser His Lys Gln Lys Ala Ser Gly Gln Ala Val Asp Asp Phe Lys Thr
 130 135 140

Gln Gly Val Asn Ile Glu Gln Phe Arg Glu Leu Lys Asn Thr Val Ser
 145 150 155 160

Tyr Ser Gly Lys Arg Lys Gly Pro Asp Ser Leu Ser Asp Gly Pro Ala
 165 170 175

Cys Lys Arg Pro Ala Leu Leu His Ser Gln Phe Leu Thr Pro Pro Gln
 180 185 190

Thr Pro Thr Pro Gly Glu Ser Met Glu Asp Val His Leu Asn Glu Pro
 195 200 205

Lys Gln Glu Ser Ser Ala Asp Leu Leu Gln Asn Ile Ile Asn Ile Lys
 210 215 220

Asn Glu Cys Ser Pro Val Ser Leu Asn Thr Val Gln Val Ser Trp Leu
 225 230 235 240

Asn Pro Val Val Val Pro Gln Ser Ser Pro Ala Glu Gln Cys Gln Asp
 245 250 255

Phe His Gly Gly Gln Val Phe Ser Pro Pro Gln Lys Cys Gln Pro Phe
 260 265 270

Gln Val Arg Gly Ser Gln Gln Met Ile Asp Gln Ala Ser Leu Tyr Gln
 275 280 285

Tyr Ser Pro Gln Asn Gln His Val Glu Gln Gln Pro His Tyr Thr His
 290 295 300

Lys Pro Thr Leu Glu Tyr Ser Pro Phe Pro Ile Pro Pro Gln Ser Pro
 305 310 315 320

Ala Tyr Glu Pro Asn Leu Phe Asp Gly Pro Glu Ser Gln Phe Cys Pro
 325 330 335

Asn Gln Ser Leu Val Ser Leu Leu Gly Asp Gln Arg Glu Ser Glu Asn
 340 345 350

Ile Ala Asn Pro Met Gln Thr Ser Ser Ser Val Gln Gln Gln Asn Asp
 355 360 365

Ala His Leu His Ser Phe Ser Met Met Pro Ser Ser Ala Cys Glu Ala
 370 375 380

Met Val Gly His Glu Met Ala Ser Asp Ser Ser Asn Thr Ser Leu Pro
 385 390 395 400

Phe Ser Asn Met Gly Asn Pro Met Asn Thr Thr Gln Leu Gly Lys Ser
 405 410 415

Leu Phe Gln Trp Gln Val Glu Gln Glu Glu Ser Lys Leu Ala Asn Ile
 420 425 430

Ser Gln Asp Gln Phe Leu Ser Lys Asp Ala Asp Gly Asp Thr Phe Leu
 435 440 445

His Ile Ala Val Ala Gln Gly Arg Arg Ala Leu Ser Tyr Val Leu Ala
 450 455 460

Arg Lys Met Asn Ala Leu His Met Leu Asp Ile Lys Glu His Asn Gly
 465 470 475 480

Gln Ser Ala Phe Gln Val Ala Val Ala Ala Asn Gln His Leu Ile Val
 485 490 495

Gln Asp Leu Val Asn Ile Gly Ala Gln Val Asn Thr Thr Asp Cys Trp
 500 505 510

Gly Arg Thr Pro Leu His Val Cys Ala Glu Lys Gly His Ser Gln Val

515 520 525
 Leu Gln Ala Ile Gln Lys Gly Ala Val Gly Ser Asn Gln Phe Val Asp
 530 535 540
 Leu Glu Ala Thr Asn Tyr Asp Gly Leu Thr Pro Leu His Cys Ala Val
 545 550 555 560
 Ile Ala His Asn Ala Val Val His Glu Leu Gln Arg Asn Gln Gln Pro
 565 570 575
 His Ser Pro Glu Val Gln Glu Leu Leu Leu Lys Asn Lys Ser Leu Val
 580 585 590
 Asp Thr Ile Lys Cys Leu Ile Gln Met Gly Ala Ala Val Glu Ala Lys
 595 600 605
 Asp Arg Lys Ser Gly Arg Thr Ala Leu His Leu Ala Ala Glu Glu Ala
 610 615 620
 Asn Leu Glu Leu Ile Arg Leu Phe Leu Glu Leu Pro Ser Cys Leu Ser
 625 630 635 640
 Phe Val Asn Ala Lys Ala Tyr Asn Gly Asn Thr Ala Leu His Val Ala
 645 650 655
 Ala Ser Leu Gln Tyr Arg Leu Thr Gln Leu Asp Ala Val Arg Leu Leu
 660 665 670
 Met Arg Lys Gly Ala Asp Pro Ser Thr Arg Asn Leu Glu Asn Glu Gln
 675 680 685
 Pro Val His Leu Val Pro Asp Gly Pro Val Gly Glu Gln Ile Arg Arg
 690 695 700
 Ile Leu Lys Gly Lys Ser Ile Gln Gln Arg Ala Pro Pro Tyr
 705 710 715
 <210> 2940
 <211> 247
 <212> PRT
 <213> Homo sapiens
 <400> 2940
 Met Gln Pro Ile Leu Leu Leu Leu Ala Phe Leu Leu Leu Pro Arg Ala
 1 5 10 15

Asp Ala Gly Glu Ile Ile Gly Gly His Glu Ala Lys Pro His Ser Arg
 20 25 30

Pro Tyr Met Ala Tyr Leu Met Ile Trp Asp Gln Lys Ser Leu Lys Arg
 35 40 45

Cys Gly Gly Phe Leu Ile Gln Asp Asp Phe Val Leu Thr Ala Ala His
 50 55 60

Cys Trp Gly Ser Ser Ile Asn Val Thr Leu Gly Ala His Asn Ile Lys
 65 70 75 80

Glu Gln Glu Pro Thr Gln Gln Phe Ile Pro Val Lys Arg Pro Ile Pro
 85 90 95

His Pro Ala Tyr Asn Pro Lys Asn Phe Ser Asn Asp Ile Met Leu Leu
 100 105 110

Gln Leu Glu Arg Lys Ala Lys Arg Thr Arg Ala Val Gln Pro Leu Arg
 115 120 125

Leu Pro Ser Asn Lys Ala Gln Val Lys Pro Gly Gln Thr Cys Ser Val
 130 135 140

Ala Gly Trp Gly Gln Thr Ala Pro Leu Gly Lys His Ser His Thr Leu
 145 150 155 160

Gln Glu Val Lys Met Thr Val Gln Glu Asp Arg Lys Cys Glu Ser Asp
 165 170 175

Leu Arg His Tyr Tyr Asp Ser Thr Ile Glu Leu Cys Val Gly Asp Pro
 180 185 190

Glu Ile Lys Lys Thr Ser Phe Lys Gly Asp Ser Gly Gly Pro Leu Val
 195 200 205

Cys Asn Lys Val Ala Gln Gly Ile Val Ser Tyr Gly Arg Asn Asn Gly
 210 215 220

Met Pro Pro Arg Ala Cys Thr Lys Val Ser Ser Phe Val His Trp Ile
 225 230 235 240

Lys Lys Thr Met Lys Arg Tyr
 245

<210> 2941
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 2941

Met His Asp Ser Asn Asn Val Glu Lys Asp Ile Thr Pro Ser Glu Leu
 1 5 10 15

Pro Ala Asn Pro Gly Cys Leu His Ser Lys Glu His Ser Ile Lys Ala
 20 25 30

Thr Leu Ile Trp Arg Leu Phe Phe Leu Ile Met Phe Leu Thr Ile Ile
 35 40 45

Val Cys Gly Met Val Ala Ala Leu Ser Ala Ile Arg Ala Asn Cys His
 50 55 60

Gln Glu Pro Ser Val Cys Leu Gln Ala Ala Cys Pro Glu Ser Trp Ile
 65 70 75 80

Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser Asp Asp Thr Lys Asn Trp
 85 90 95

Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln Asp Ala Asp Leu Ala Gln
 100 105 110

Val Glu Ser Phe Gln Glu Leu Asn Phe Leu Leu Arg Tyr Lys Gly Pro
 115 120 125

Ser Asp His Trp Ile Gly Leu Ser Arg Glu Gln Gly Gln Pro Trp Lys
 130 135 140

Trp Ile Asn Gly Thr Glu Trp Thr Arg Gln Phe Pro Ile Leu Gly Ala
 145 150 155 160

Gly Glu Cys Ala Tyr Leu Asn Asp Lys Gly Ala Ser Ser Ala Arg His
 165 170 175

Tyr Thr Glu Arg Lys Trp Ile Cys Ser Lys Ser Asp Ile His Val
 180 185 190

<210> 2942
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 2942

Met Glu Ile Arg Leu Asp Thr Leu Ser Ala Ser Leu Gly Arg Ser Ser
 1 5 10 15
 Thr Leu Asn Asp Cys Asn Leu Glu Asp Lys Leu Ala Trp Tyr Glu Gly
 20 25 30
 Glu Ala Tyr Met Trp His His Trp Lys Pro Phe Pro Glu Asn Pro Leu
 35 40 45
 Trp Thr Cys Leu Asp Phe Gln Ile Ala Gln Val Gly Pro Trp Asp Tyr
 50 55 60
 Cys Ser Ser Cys Ile Arg His Thr Arg Leu Lys Ser Ser Cys Ser Asp
 65 70 75 80
 Met Asp Leu Leu His Ser Trp Arg Ser Ser Ser Phe Gly Asn Phe Asp
 85 90 95
 Arg Phe Arg Asn Asn Ser Leu Ser Lys Pro Asp Asp Ser Thr Glu Ala
 100 105 110
 His Glu Gly Asp Pro Thr Asn Gly Ser Gly Glu Gln Ser Lys Thr Ser
 115 120 125
 Asn Asn Gly Gly Gly Leu Gly Lys Lys Met Arg Ala Ile Ser Trp Thr
 130 135 140
 Met Lys Lys Lys Val Gly Lys Lys Tyr Ile Lys Ala Leu Ser Glu Glu
 145 150 155 160
 Lys Asp Glu Glu Asp Gly Glu Asn Ala His Pro Tyr Arg Asn Ser Asp
 165 170 175
 Pro Val Ile Gly Thr His Thr Glu Lys Val Ser Leu Lys Ala Ser Asp
 180 185 190
 Ser Met Asp Ser Leu Tyr Ser Gly Gln Ser Ser Ser Ser Gly Ile Thr
 195 200 205
 Ser Cys Ser Asp Gly Thr Ser Asn Arg Asp Ser Phe Arg Leu Asp Asp
 210 215 220
 Asp Gly Pro Tyr Ser Gly Pro Phe Cys Gly Arg Ala Arg Val His Thr
 225 230 235 240

Asp Phe Thr Pro Ser Pro Tyr Asp Thr Asp Ser Leu Lys Ile Lys Lys
245 250 255

Gly Asp Ile Ile Asp Ile Ile Cys Lys Thr Pro Met Gly Met Trp Thr
260 265 270

Gly Met Leu Asn Asn Lys Val Gly Asn Phe Lys Phe Ile Tyr Val Asp
275 280 285

Val Ile Ser Glu Glu Glu Ala Ala Pro Lys Lys Ile Lys Ala Asn Arg
290 295 300

Arg Ser Asn Ser Lys Lys Ser Lys Thr Leu Gln Glu Phe Leu Glu Arg
305 310 315 320

Ile His Leu Gln Glu Tyr Thr Ser Thr Leu Leu Leu Asn Gly Tyr Glu
325 330 335

Thr Leu Glu Asp Leu Lys Asp Ile Lys Glu Ser His Leu Ile Glu Leu
340 345 350

Asn Ile Glu Asn Pro Asp Asp Arg Arg Arg Leu Leu Ser Ala Ala Glu
355 360 365

Asn Phe Leu Glu Glu Glu Ile Ile Gln Glu Gln Glu Asn Glu Pro Glu
370 375 380

Pro Leu Ser Leu Ser Ser Asp Ile Ser Leu Asn Lys Ser Gln Leu Asp
385 390 395 400

Asp Cys Pro Arg Asp Ser Gly Cys Tyr Ile Ser Ser Gly Asn Ser Asp
405 410 415

Asn Gly Lys Glu Asp Leu Glu Ser Glu Asn Leu Ser Asp Met Val His
420 425 430

Lys Ile Ile Ile Thr Glu Pro Ser Asp
435 440

<210> 2943

<211> 564

<212> PRT

<213> Homo sapiens

<400> 2943

Met Lys Glu His Gly Gly Thr Phe Ser Ser Thr Gly Ile Ser Gly Gly
1 5 10 15

Ser Gly Asp Ser Ala Met Asp Ser Leu Gln Pro Leu Gln Pro Asn Tyr
 20 25 30

Met Pro Val Cys Leu Phe Ala Glu Glu Ser Tyr Gln Lys Leu Ala Met
 35 40 45

Glu Thr Leu Glu Glu Leu Asp Trp Cys Leu Asp Gln Leu Glu Thr Ile
 50 55 60

Gln Thr Tyr Arg Ser Val Ser Glu Met Ala Ser Asn Lys Phe Lys Arg
 65 70 75 80

Met Leu Asn Arg Glu Leu Thr His Leu Ser Glu Met Ser Arg Ser Gly
 85 90 95

Asn Gln Val Ser Glu Tyr Ile Ser Asn Thr Phe Leu Asp Lys Gln Asn
 100 105 110

Asp Val Glu Ile Pro Ser Pro Thr Gln Lys Asp Arg Glu Lys Lys Lys
 115 120 125

Lys Gln Gln Leu Met Thr Gln Ile Ser Gly Val Lys Lys Leu Met His
 130 135 140

Ser Ser Ser Leu Asn Asn Thr Ser Ile Ser Arg Phe Gly Val Asn Thr
 145 150 155 160

Glu Asn Glu Asp His Leu Ala Lys Glu Leu Glu Asp Leu Asn Lys Trp
 165 170 175

Gly Leu Asn Ile Phe Asn Val Ala Gly Tyr Ser His Asn Arg Pro Leu
 180 185 190

Thr Cys Ile Met Tyr Ala Ile Phe Gln Glu Arg Asp Leu Leu Lys Thr
 195 200 205

Phe Arg Ile Ser Ser Asp Thr Phe Ile Thr Tyr Met Met Thr Leu Glu
 210 215 220

Asp His Tyr His Ser Asp Val Ala Tyr His Asn Ser Leu His Ala Ala
 225 230 235 240

Asp Val Ala Gln Ser Thr His Val Leu Leu Ser Thr Pro Ala Leu Asp
 245 250 255

Ala Val Phe Thr Asp Leu Glu Ile Leu Ala Ala Ile Phe Ala Ala Ala
260 265 270

Ile His Asp Val Asp His Pro Gly Val Ser Asn Gln Phe Leu Ile Asn
275 280 285

Thr Asn Ser Glu Leu Ala Leu Met Tyr Asn Asp Glu Ser Val Leu Glu
290 295 300

Asn His His Leu Ala Val Gly Phe Lys Leu Leu Gln Glu Glu His Cys
305 310 315 320

Asp Ile Phe Met Asn Leu Thr Lys Lys Gln Arg Gln Thr Leu Arg Lys
325 330 335

Met Val Ile Asp Met Val Leu Ala Thr Asp Met Ser Lys His Met Ser
340 345 350

Leu Leu Ala Asp Leu Lys Thr Met Val Glu Thr Lys Lys Val Thr Ser
355 360 365

Ser Gly Val Leu Leu Leu Asp Asn Tyr Thr Asp Arg Ile Gln Val Leu
370 375 380

Arg Asn Met Val His Cys Ala Asp Leu Ser Asn Pro Thr Lys Ser Leu
385 390 395 400

Glu Leu Tyr Arg Gln Trp Thr Asp Arg Ile Met Glu Glu Phe Phe Gln
405 410 415

Gln Gly Asp Lys Glu Arg Glu Arg Gly Met Glu Ile Ser Pro Met Cys
420 425 430

Asp Lys His Thr Ala Ser Val Glu Lys Ser Gln Val Gly Phe Ile Asp
435 440 445

Tyr Ile Val His Pro Leu Trp Glu Thr Trp Ala Asp Leu Val Gln Pro
450 455 460

Asp Ala Gln Asp Ile Leu Asp Thr Leu Glu Asp Asn Arg Asn Trp Tyr
465 470 475 480

Gln Ser Met Ile Pro Gln Ser Pro Ser Pro Pro Leu Asp Glu Gln Asn
485 490 495

Arg Asp Cys Gln Gly Leu Met Glu Lys Phe Gln Phe Glu Leu Thr Leu
500 505 510

Asp Glu Glu Asp Ser Glu Gly Pro Glu Lys Glu Gly Glu Gly His Ser
515 520 525

Tyr Phe Ser Ser Thr Lys Thr Leu Cys Val Ile Asp Pro Glu Asn Arg
530 535 540

Asp Ser Leu Gly Glu Thr Asp Ile Asp Ile Ala Thr Glu Asp Lys Ser
545 550 555 560

Pro Val Asp Thr

<210> 2944

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2944

Met Lys Val Ser Ala Ala Ala Leu Ala Val Ile Leu Ile Ala Thr Ala
1 5 10 15

Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro
20 25 30

Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys
35 40 45

Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe
50 55 60

Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp
65 70 75 80

Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser
85 90

<210> 2945

<211> 461

<212> PRT

<213> Homo sapiens

<400> 2945

Met Ala Pro Val Ala Val Trp Ala Ala Leu Ala Val Gly Leu Glu Leu
1 5 10 15

Trp Ala Ala Ala His Ala Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr
 20 25 30

Ala Pro Glu Pro Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln
 35 40 45

Thr Ala Gln Met Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys
 50 55 60

Val Phe Cys Thr Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp
 65 70 75 80

Ser Thr Tyr Thr Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys
 85 90 95

Gly Ser Arg Cys Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg
 100 105 110

Glu Gln Asn Arg Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu
 115 120 125

Ser Lys Gln Glu Gly Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg
 130 135 140

Pro Gly Phe Gly Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val
 145 150 155 160

Cys Lys Pro Cys Ala Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr
 165 170 175

Asp Ile Cys Arg Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly
 180 185 190

Asn Ala Ser Met Asp Ala Val Cys Thr Ser Thr Ser Pro Thr Arg Ser
 195 200 205

Met Ala Pro Gly Ala Val His Leu Pro Gln Pro Val Ser Thr Arg Ser
 210 215 220

Gln His Thr Gln Pro Thr Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser
 225 230 235 240

Phe Leu Leu Pro Met Gly Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly
 245 250 255

Asp Phe Ala Leu Pro Val Gly Leu Ile Val Gly Val Thr Ala Leu Gly
 260 265 270

Leu Leu Ile Ile Gly Val Val Asn Cys Val Ile Met Thr Gln Val Lys
 275 280 285

Lys Lys Pro Leu Cys Leu Gln Arg Glu Ala Lys Val Pro His Leu Pro
 290 295 300

Ala Asp Lys Ala Arg Gly Thr Gln Gly Pro Glu Gln Gln His Leu Leu
 305 310 315 320

Ile Thr Ala Pro Ser Ser Ser Ser Ser Ser Leu Glu Ser Ser Ala Ser
 325 330 335

Ala Leu Asp Arg Arg Ala Pro Thr Arg Asn Gln Pro Gln Ala Pro Gly
 340 345 350

Val Glu Ala Ser Gly Ala Gly Glu Ala Arg Ala Ser Thr Gly Ser Ser
 355 360 365

Asp Ser Ser Pro Gly Gly His Gly Thr Gln Val Asn Val Thr Cys Ile
 370 375 380

Val Asn Val Cys Ser Ser Ser Asp His Ser Ser Gln Cys Ser Ser Gln
 385 390 395 400

Ala Ser Ser Thr Met Gly Asp Thr Asp Ser Ser Pro Ser Glu Ser Pro
 405 410 415

Lys Asp Glu Gln Val Pro Phe Ser Lys Glu Glu Cys Ala Phe Arg Ser
 420 425 430

Gln Leu Glu Thr Pro Glu Thr Leu Leu Gly Ser Thr Glu Glu Lys Pro
 435 440 445

Leu Pro Leu Gly Val Pro Asp Ala Gly Met Lys Pro Ser
 450 455 460

<210> 2946

<211> 823

<212> PRT

<213> Homo sapiens

<400> 2946

Met Ser Arg Arg Lys Gln Gly Asn Pro Gln His Leu Ser Gln Arg Glu
 1 5 10 15

Leu Ile Thr Pro Glu Ala Asp His Val Glu Ala Ala Ile Leu Glu Glu
 20 25 30

Asp Glu Gly Leu Glu Ile Glu Glu Pro Ser Gly Leu Gly Leu Met Val
 35 40 45

Gly Gly Pro Asp Pro Asp Leu Leu Thr Cys Gly Gln Cys Gln Met Asn
 50 55 60

Phe Pro Leu Gly Asp Ile Leu Val Phe Ile Glu His Lys Arg Lys Gln
 65 70 75 80

Cys Gly Gly Ser Leu Gly Ala Cys Tyr Asp Lys Ala Leu Asp Lys Asp
 85 90 95

Ser Pro Pro Pro Ser Ser Arg Ser Glu Leu Arg Lys Val Ser Glu Pro
 100 105 110

Val Glu Ile Gly Ile Gln Val Thr Pro Asp Glu Asp Asp His Leu Leu
 115 120 125

Ser Pro Thr Lys Gly Ile Cys Pro Lys Gln Glu Asn Ile Ala Gly Lys
 130 135 140

Asp Glu Pro Ser Ser Tyr Ile Cys Thr Thr Cys Lys Gln Pro Phe Asn
 145 150 155 160

Ser Ala Trp Phe Leu Leu Gln His Ala Gln Asn Thr His Gly Phe Arg
 165 170 175

Ile Tyr Leu Glu Pro Gly Pro Ala Ser Ser Ser Leu Thr Pro Arg Leu
 180 185 190

Thr Ile Pro Pro Pro Leu Gly Pro Glu Ala Val Ala Gln Ser Pro Leu
 195 200 205

Met Asn Phe Leu Gly Asp Ser Asn Pro Phe Asn Leu Leu Arg Met Thr
 210 215 220

Gly Pro Ile Leu Arg Asp His Pro Gly Phe Gly Glu Gly Arg Leu Pro
 225 230 235 240

Gly Thr Pro Pro Leu Phe Ser Pro Pro Pro Arg His His Leu Asp Pro
 245 250 255

His Arg Leu Ser Ala Glu Glu Met Gly Leu Val Ala Gln His Pro Ser
 260 265 270

Ala Phe Asp Arg Val Met Arg Leu Asn Pro Met Ala Ile Asp Ser Pro
 275 280 285

Ala Met Asp Phe Ser Arg Arg Leu Arg Glu Leu Ala Gly Asn Ser Ser
 290 295 300

Thr Pro Pro Pro Val Ser Pro Gly Arg Gly Asn Pro Met His Arg Leu
 305 310 315 320

Leu Asn Pro Phe Gln Pro Ser Pro Lys Ser Pro Phe Leu Ser Thr Pro
 325 330 335

Pro Leu Pro Pro Met Pro Pro Gly Gly Thr Pro Pro Pro Gln Pro Pro
 340 345 350

Ala Lys Ser Lys Ser Cys Glu Phe Cys Gly Lys Thr Phe Lys Phe Gln
 355 360 365

Ser Asn Leu Ile Val His Arg Arg Ser His Thr Gly Glu Lys Pro Tyr
 370 375 380

Lys Cys Gln Leu Cys Asp His Ala Cys Ser Gln Ala Ser Lys Leu Lys
 385 390 395 400

Arg His Met Lys Thr His Met His Lys Ala Gly Ser Leu Ala Gly Arg
 405 410 415

Ser Asp Asp Gly Leu Ser Ala Ala Ser Ser Pro Glu Pro Gly Thr Ser
 420 425 430

Glu Leu Ala Gly Glu Gly Leu Lys Ala Ala Asp Gly Asp Phe Arg His
 435 440 445

His Glu Ser Asp Pro Ser Leu Gly His Glu Pro Glu Glu Glu Asp Glu
 450 455 460

Glu Glu Glu Glu Glu Glu Glu Leu Leu Leu Glu Asn Glu Ser Arg
 465 470 475 480

Pro Glu Ser Ser Phe Ser Met Asp Ser Glu Leu Ser Arg Asn Arg Glu
 485 490 495

Asn Gly Gly Gly Gly Val Pro Gly Val Pro Gly Ala Gly Gly Gly Ala
 500 505 510

Ala Lys Ala Leu Ala Asp Glu Lys Ala Leu Val Leu Gly Lys Val Met
 515 520 525

Glu Asn Val Gly Leu Gly Ala Leu Pro Gln Tyr Gly Glu Leu Leu Ala
 530 535 540

Asp Lys Gln Lys Arg Gly Ala Phe Leu Lys Arg Ala Ala Gly Gly Gly
 545 550 555 560

Asp Ala Gly Asp Asp Asp Asp Ala Gly Gly Cys Gly Asp Ala Gly Ala
 565 570 575

Gly Gly Ala Val Asn Gly Arg Gly Gly Gly Phe Ala Pro Gly Thr Glu
 580 585 590

Pro Phe Pro Gly Leu Phe Pro Arg Lys Pro Ala Pro Leu Pro Ser Pro
 595 600 605

Gly Leu Asn Ser Ala Ala Lys Arg Ile Lys Val Glu Lys Asp Leu Glu
 610 615 620

Leu Pro Pro Ala Ala Leu Ile Pro Ser Glu Asn Val Tyr Ser Gln Trp
 625 630 635 640

Leu Val Gly Tyr Ala Ala Ser Arg His Phe Met Lys Asp Pro Phe Leu
 645 650 655

Gly Phe Thr Asp Ala Arg Gln Ser Pro Phe Ala Thr Ser Ser Glu His
 660 665 670

Ser Ser Glu Asn Gly Ser Leu Arg Phe Ser Thr Pro Pro Gly Asp Leu
 675 680 685

Leu Asp Gly Gly Leu Ser Gly Arg Ser Gly Thr Ala Ser Gly Gly Ser
 690 695 700

Thr Pro His Leu Gly Gly Pro Gly Pro Gly Arg Pro Ser Ser Lys Glu
 705 710 715 720

Gly Arg Arg Ser Asp Thr Cys Glu Tyr Cys Gly Lys Val Phe Lys Asn
 725 730 735

Cys Ser Asn Leu Thr Val His Arg Arg Ser His Thr Gly Glu Arg Pro

740

745

750

Tyr Lys Cys Glu Leu Cys Asn Tyr Ala Cys Ala Gln Ser Ser Lys Leu
 755 760 765

Thr Arg His Met Lys Thr His Gly Gln Ile Gly Lys Glu Val Tyr Arg
 770 775 780

Cys Asp Ile Cys Gln Met Pro Phe Ser Val Tyr Ser Thr Leu Glu Lys
 785 790 795 800

His Met Lys Lys Trp His Gly Glu His Leu Leu Thr Asn Asp Val Lys
 805 810 815

Ile Glu Gln Ala Glu Arg Ser
 820

<210> 2947

<211> 441

<212> PRT

<213> Homo sapiens

<400> 2947

Met Val Pro Pro Lys Leu His Val Leu Phe Cys Leu Cys Gly Cys Leu
 1 5 10 15

Ala Val Val Tyr Pro Phe Asp Trp Gln Tyr Ile Asn Pro Val Ala His
 20 25 30

Met Lys Ser Ser Ala Trp Val Asn Lys Ile Gln Val Leu Met Ala Ala
 35 40 45

Ala Ser Phe Gly Gln Thr Lys Ile Pro Arg Gly Asn Gly Pro Tyr Ser
 50 55 60

Val Gly Cys Thr Asp Leu Met Phe Asp His Thr Asn Lys Gly Thr Phe
 65 70 75 80

Leu Arg Leu Tyr Tyr Pro Ser Gln Asp Asn Asp Arg Leu Asp Thr Leu
 85 90 95

Trp Ile Pro Asn Lys Glu Tyr Phe Trp Gly Leu Ser Lys Phe Leu Gly
 100 105 110

Thr His Trp Leu Met Gly Asn Ile Leu Arg Leu Leu Phe Gly Ser Met
 115 120 125

Thr Thr Pro Ala Asn Trp Asn Ser Pro Leu Arg Pro Gly Glu Lys Tyr
 130 135 140

Pro Leu Val Val Phe Ser His Gly Leu Gly Ala Phe Arg Thr Leu Tyr
 145 150 155 160

Ser Ala Ile Gly Ile Asp Leu Ala Ser His Gly Phe Ile Val Ala Ala
 165 170 175

Val Glu His Arg Asp Arg Ser Ala Ser Ala Thr Tyr Tyr Phe Lys Asp
 180 185 190

Gln Ser Ala Ala Glu Ile Gly Asp Lys Ser Trp Leu Tyr Leu Arg Thr
 195 200 205

Leu Lys Gln Glu Glu Glu Thr His Ile Arg Asn Glu Gln Val Arg Gln
 210 215 220

Arg Ala Lys Glu Cys Ser Gln Ala Leu Ser Leu Ile Leu Asp Ile Asp
 225 230 235 240

His Gly Lys Pro Val Lys Asn Ala Leu Asp Leu Lys Phe Asp Met Glu
 245 250 255

Gln Leu Lys Asp Ser Ile Asp Arg Glu Lys Ile Ala Val Ile Gly His
 260 265 270

Ser Phe Gly Gly Ala Thr Val Ile Gln Thr Leu Ser Glu Asp Gln Arg
 275 280 285

Phe Arg Cys Gly Ile Ala Leu Asp Ala Trp Met Phe Pro Leu Gly Asp
 290 295 300

Glu Val Tyr Ser Arg Ile Pro Gln Pro Leu Phe Phe Ile Asn Ser Glu
 305 310 315 320

Tyr Phe Gln Tyr Pro Ala Asn Ile Ile Lys Met Lys Lys Cys Tyr Ser
 325 330 335

Pro Asp Lys Glu Arg Lys Met Ile Thr Ile Arg Gly Ser Val His Gln
 340 345 350

Asn Phe Ala Asp Phe Thr Phe Ala Thr Gly Lys Ile Ile Gly His Met
 355 360 365

Leu Lys Leu Lys Gly Asp Ile Asp Ser Asn Val Ala Ile Asp Leu Ser
 370 375 380

Asn Lys Ala Ser Leu Ala Phe Leu Gln Lys His Leu Gly Leu His Lys
 385 390 395 400

Asp Phe Asp Gln Trp Asp Cys Leu Ile Glu Gly Asp Asp Glu Asn Leu
 405 410 415

Ile Pro Gly Thr Asn Ile Asn Thr Thr Asn Gln His Ile Met Leu Gln
 420 425 430

Asn Ser Ser Gly Ile Glu Lys Tyr Asn
 435 440

<210> 2948

<211> 1044

<212> PRT

<213> Homo sapiens

<400> 2948

Met Pro Pro Gly Val Asp Cys Pro Met Glu Phe Trp Thr Lys Glu Glu
 1 5 10 15

Asn Gln Ser Val Val Val Asp Phe Leu Leu Pro Thr Gly Val Tyr Leu
 20 25 30

Asn Phe Pro Val Ser Arg Asn Ala Asn Leu Ser Thr Ile Lys Gln Leu
 35 40 45

Leu Trp His Arg Ala Gln Tyr Glu Pro Leu Phe His Met Leu Ser Gly
 50 55 60

Pro Glu Ala Tyr Val Phe Thr Cys Ile Asn Gln Thr Ala Glu Gln Gln
 65 70 75 80

Glu Leu Glu Asp Glu Gln Arg Arg Leu Cys Asp Val Gln Pro Phe Leu
 85 90 95

Pro Val Leu Arg Leu Val Ala Arg Glu Gly Asp Arg Val Lys Lys Leu
 100 105 110

Ile Asn Ser Gln Ile Ser Leu Leu Ile Gly Lys Gly Leu His Glu Phe
 115 120 125

Asp Ser Leu Cys Asp Pro Glu Val Asn Asp Phe Arg Ala Lys Met Cys
 130 135 140

Gln Phe Cys Glu Glu Ala Ala Arg Arg Gln Gln Leu Gly Trp Glu
 145 150 155 160
 Ala Trp Leu Gln Tyr Ser Phe Pro Leu Gln Leu Glu Pro Ser Ala Gln
 165 170 175
 Thr Trp Gly Pro Gly Thr Leu Arg Leu Pro Asn Arg Ala Leu Leu Val
 180 185 190
 Asn Val Lys Phe Glu Gly Ser Glu Glu Ser Phe Thr Phe Gln Val Ser
 195 200 205
 Thr Lys Asp Val Pro Leu Ala Leu Met Ala Cys Ala Leu Arg Lys Lys
 210 215 220
 Ala Thr Val Phe Arg Gln Pro Leu Val Glu Gln Pro Glu Asp Tyr Thr
 225 230 235 240
 Leu Gln Val Asn Gly Arg His Glu Tyr Leu Tyr Gly Asn Tyr Pro Leu
 245 250 255
 Cys Gln Phe Gln Tyr Ile Cys Ser Cys Leu His Ser Gly Leu Thr Pro
 260 265 270
 His Leu Thr Met Val His Ser Ser Ser Ile Leu Ala Met Arg Asp Glu
 275 280 285
 Gln Ser Asn Pro Ala Pro Gln Val Gln Lys Pro Arg Ala Lys Pro Pro
 290 295 300
 Pro Ile Pro Ala Lys Lys Pro Ser Ser Val Ser Leu Trp Ser Leu Glu
 305 310 315 320
 Gln Pro Phe Arg Ile Glu Leu Ile Gln Gly Ser Lys Val Asn Ala Asp
 325 330 335
 Glu Arg Met Lys Leu Val Val Gln Ala Gly Leu Phe His Gly Asn Glu
 340 345 350
 Met Leu Cys Lys Thr Val Ser Ser Ser Glu Val Ser Val Cys Ser Glu
 355 360 365
 Pro Val Trp Lys Gln Arg Leu Glu Phe Asp Ile Asn Ile Cys Asp Leu
 370 375 380

Pro Arg Met Ala Arg Leu Cys Phe Ala Leu Tyr Ala Val Ile Glu Lys
 385 390 395 400

Ala Lys Lys Ala Arg Ser Thr Lys Lys Lys Ser Lys Lys Ala Asp Cys
 405 410 415

Pro Ile Ala Trp Ala Asn Leu Met Leu Phe Asp Tyr Lys Asp Gln Leu
 420 425 430

Lys Thr Gly Glu Arg Cys Leu Tyr Met Trp Pro Ser Val Pro Asp Glu
 435 440 445

Lys Gly Glu Leu Leu Asn Pro Thr Gly Thr Val Arg Ser Asn Pro Asn
 450 455 460

Thr Asp Ser Ala Ala Ala Leu Leu Ile Cys Leu Pro Glu Val Ala Pro
 465 470 475 480

His Pro Val Tyr Tyr Pro Ala Leu Glu Lys Ile Leu Glu Leu Gly Arg
 485 490 495

His Ser Glu Cys Val His Val Thr Glu Glu Glu Gln Leu Gln Leu Arg
 500 505 510

Glu Ile Leu Glu Arg Arg Gly Ser Gly Glu Leu Tyr Glu His Glu Lys
 515 520 525

Asp Leu Val Trp Lys Leu Arg His Glu Val Gln Glu His Phe Pro Glu
 530 535 540

Ala Leu Ala Arg Leu Leu Leu Val Thr Lys Trp Asn Lys His Glu Asp
 545 550 555 560

Val Ala Gln Met Leu Tyr Leu Leu Cys Ser Trp Pro Glu Leu Pro Val
 565 570 575

Leu Ser Ala Leu Glu Leu Leu Asp Phe Ser Phe Pro Asp Cys His Val
 580 585 590

Gly Ser Phe Ala Ile Lys Ser Leu Arg Lys Leu Thr Asp Asp Glu Leu
 595 600 605

Phe Gln Tyr Leu Leu Gln Leu Val Gln Val Leu Lys Tyr Glu Ser Tyr
 610 615 620

Leu Asp Cys Glu Leu Thr Lys Phe Leu Leu Asp Arg Ala Leu Ala Asn
 625 630 635 640

Arg Lys Ile Gly His Phe Leu Phe Trp His Leu Arg Ser Glu Met His
 645 650 655

Val Pro Ser Val Ala Leu Arg Phe Gly Leu Ile Leu Glu Ala Tyr Cys
 660 665 670

Arg Gly Ser Thr His His Met Lys Val Leu Met Lys Gln Gly Glu Ala
 675 680 685

Leu Ser Lys Leu Lys Ala Leu Asn Asp Phe Val Lys Leu Ser Ser Gln
 690 695 700

Lys Thr Pro Lys Pro Gln Thr Lys Glu Leu Met His Leu Cys Met Arg
 705 710 715 720

Gln Glu Ala Tyr Leu Glu Ala Leu Ser His Leu Gln Ser Pro Leu Asp
 725 730 735

Pro Ser Thr Leu Leu Ala Glu Val Cys Val Glu Gln Cys Thr Phe Met
 740 745 750

Asp Ser Lys Met Lys Pro Leu Trp Ile Met Tyr Ser Asn Glu Glu Ala
 755 760 765

Gly Ser Gly Gly Ser Val Gly Ile Ile Phe Lys Asn Gly Asp Asp Leu
 770 775 780

Arg Gln Asp Met Leu Thr Leu Gln Met Ile Gln Leu Met Asp Val Leu
 785 790 795 800

Trp Lys Gln Glu Gly Leu Asp Leu Arg Met Thr Pro Tyr Gly Cys Leu
 805 810 815

Pro Thr Gly Asp Arg Thr Gly Leu Ile Glu Val Val Leu Arg Ser Asp
 820 825 830

Thr Ile Ala Asn Ile Gln Leu Asn Lys Ser Asn Met Ala Ala Thr Ala
 835 840 845

Ala Phe Asn Lys Asp Ala Leu Leu Asn Trp Leu Lys Ser Lys Asn Pro
 850 855 860

Gly Glu Ala Leu Asp Arg Ala Ile Glu Glu Phe Thr Leu Ser Cys Ala

865 870 875 880

 Gly Tyr Cys Val Ala Thr Tyr Val Leu Gly Ile Gly Asp Arg His Ser
 885 890 895

 Asp Asn Ile Met Ile Arg Glu Ser Gly Gln Leu Phe His Ile Asp Phe
 900 905 910

 Gly His Phe Leu Gly Asn Phe Lys Thr Lys Phe Gly Ile Asn Arg Glu
 915 920 925

 Arg Val Pro Phe Ile Leu Thr Tyr Asp Phe Val His Val Ile Gln Gln
 930 935 940

 Gly Lys Thr Asn Asn Ser Glu Lys Phe Glu Arg Phe Arg Gly Tyr Cys
 945 950 955 960

 Glu Arg Ala Tyr Thr Ile Leu Arg Arg His Gly Leu Leu Phe Leu His
 965 970 975

 Leu Phe Ala Leu Met Arg Ala Ala Gly Leu Pro Glu Leu Ser Cys Ser
 980 985 990

 Lys Asp Ile Gln Tyr Leu Lys Asp Ser Leu Ala Leu Gly Lys Thr Glu
 995 1000 1005

 Glu Glu Ala Leu Lys His Phe Arg Val Lys Phe Asn Glu Ala Leu
 1010 1015 1020

 Arg Glu Ser Trp Lys Thr Lys Val Asn Trp Leu Ala His Asn Val
 1025 1030 1035

 Ser Lys Asp Asn Arg Gln
 1040

 <210> 2949
 <211> 167
 <212> PRT
 <213> Homo sapiens

 <400> 2949

 Met Glu His Ile His Asp Ser Asp Gly Ser Ser Ser Ser Ser His Gln
 1 5 10 15

 Ser Leu Lys Ser Thr Ala Lys Trp Ala Ala Ser Leu Glu Asn Leu Leu
 20 25 30

Glu Asp Pro Glu Gly Val Lys Arg Phe Arg Glu Phe Leu Lys Lys Glu
 35 40 45

Phe Ser Glu Glu Asn Val Leu Phe Trp Leu Ala Cys Glu Asp Phe Lys
 50 55 60

Lys Met Gln Asp Lys Thr Gln Met Gln Glu Lys Ala Lys Glu Ile Tyr
 65 70 75 80

Met Thr Phe Leu Ser Ser Lys Ala Ser Ser Gln Val Asn Val Glu Gly
 85 90 95

Gln Ser Arg Leu Asn Glu Lys Ile Leu Glu Glu Pro His Pro Leu Met
 100 105 110

Phe Gln Lys Leu Gln Asp Gln Ile Phe Asn Leu Met Lys Tyr Asp Ser
 115 120 125

Tyr Ser Arg Phe Leu Lys Ser Asp Leu Phe Leu Lys His Lys Arg Thr
 130 135 140

Glu Glu Glu Glu Glu Asp Leu Pro Asp Ala Gln Thr Ala Ala Lys Arg
 145 150 155 160

Ala Ser Arg Ile Tyr Asn Thr
 165

<210> 2950
 <211> 263
 <212> PRT
 <213> Homo sapiens

<400> 2950

Met Val Lys Ile Ala Phe Asn Thr Pro Thr Ala Val Gln Lys Glu Glu
 1 5 10 15

Ala Arg Gln Asp Val Glu Ala Leu Leu Ser Arg Thr Val Arg Thr Gln
 20 25 30

Ile Leu Thr Gly Lys Glu Leu Arg Val Ala Thr Gln Glu Lys Glu Gly
 35 40 45

Ser Ser Gly Arg Cys Met Leu Thr Leu Leu Gly Leu Ser Phe Ile Leu
 50 55 60

Ala Gly Leu Ile Val Gly Gly Ala Cys Ile Tyr Lys Tyr Phe Met Pro

65	70										75					80				
Lys	Ser	Thr	Ile	Tyr	Arg	Gly	Glu	Met	Cys	Phe	Phe	Asp	Ser	Glu	Asp					
				85					90					95						
Pro	Ala	Asn	Ser	Leu	Arg	Gly	Gly	Glu	Pro	Asn	Phe	Leu	Pro	Val	Thr					
			100					105					110							
Glu	Glu	Ala	Asp	Ile	Arg	Glu	Asp	Asp	Asn	Ile	Ala	Ile	Ile	Asp	Val					
		115					120					125								
Pro	Val	Pro	Ser	Phe	Ser	Asp	Ser	Asp	Pro	Ala	Ala	Ile	Ile	His	Asp					
	130					135					140									
Phe	Glu	Lys	Gly	Met	Thr	Ala	Tyr	Leu	Asp	Leu	Leu	Leu	Gly	Asn	Cys					
145					150					155				160						
Tyr	Leu	Met	Pro	Leu	Asn	Thr	Ser	Ile	Val	Met	Pro	Pro	Lys	Asn	Leu					
				165					170					175						
Val	Glu	Leu	Phe	Gly	Lys	Leu	Ala	Ser	Gly	Arg	Tyr	Leu	Pro	Gln	Thr					
			180					185					190							
Tyr	Val	Val	Arg	Glu	Asp	Leu	Val	Ala	Val	Glu	Glu	Ile	Arg	Asp	Val					
	195					200						205								
Ser	Asn	Leu	Gly	Ile	Phe	Ile	Tyr	Gln	Leu	Cys	Asn	Asn	Arg	Lys	Ser					
	210					215					220									
Phe	Arg	Leu	Arg	Arg	Arg	Asp	Leu	Leu	Leu	Gly	Phe	Asn	Lys	Arg	Ala					
225					230					235					240					
Ile	Asp	Lys	Cys	Trp	Lys	Ile	Arg	His	Phe	Pro	Asn	Glu	Phe	Ile	Val					
				245					250					255						
Glu	Thr	Lys	Ile	Cys	Gln	Glu														
			260																	
<210>	2951																			
<211>	201																			
<212>	PRT																			
<213>	Homo sapiens																			
<400>	2951																			
Met	Asp	Pro	Gly	Trp	Pro	Cys	Cys	Pro	Leu	Pro	Val	Ala	Phe	Leu	Ser					
1				5					10					15						

Arg Trp Leu Gln Ser Phe Val Asp Gly Leu Phe Cys Thr Gly Gly Leu
 20 25 30

Leu Arg Gln Arg Thr Cys Lys Phe Ala Gly Ala Ala Ser Gln Ala Pro
 35 40 45

His Ala Pro Ala Phe Leu Arg Ala Arg Gly Glu Pro Gln Asp Pro Leu
 50 55 60

Ser His Pro Arg Val Pro Ala Val Ser Ala Asn Cys Arg Met Trp Lys
 65 70 75 80

His Leu Pro Val His Ser Ser Pro Thr Pro Arg Leu Thr Pro Leu Trp
 85 90 95

Lys Leu Gln Ala Arg Trp Leu Leu Pro Gln Leu Val Tyr Leu Gln Gly
 100 105 110

Trp Gly Ser Tyr Ser Leu Leu Arg Pro Ala Ala Leu Ile Ser Met Val
 115 120 125

Leu Leu Ala Arg Glu Phe Leu Tyr Pro Ala Lys Met Ser Val Ser Glu
 130 135 140

Val Cys Ser Ser Gly Leu Ser Ser Pro Leu Leu Glu Gln His Lys Thr
 145 150 155 160

Asn Leu Ile Phe Tyr Ala Ser Gly Asp Ile Cys Ser Ala Asn Gly Lys
 165 170 175

Ser Gly Phe Asn Gln Pro Leu Pro Phe Leu Lys Thr Phe Cys Ser Thr
 180 185 190

His Arg Ile Leu Ser Cys Thr Tyr Leu
 195 200

<210> 2952
 <211> 492
 <212> PRT
 <213> Homo sapiens

<400> 2952

Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Ser Val Leu Glu Gly
 1 5 10 15

Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr Pro

20					25					30						
Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln	Val	
35					40					45						
Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val	Leu	
50					55					60						
Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe	Leu	
65					70					75					80	
Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr	Gly	
85					90					95						
Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala	Ser	Gly	Glu	
100					105					110						
Ser	Gly	Leu	Thr	Gln	Leu	Leu	Met	Thr	Glu	Val	Met	Lys	Leu	Gln	Lys	
115					120					125						
Lys	Val	Gln	Asp	Leu	Thr	Ala	Leu	Leu	Ser	Ser	Lys	Asp	Asp	Phe	Ile	
130					135					140						
Lys	Glu	Leu	Arg	Val	Lys	Asp	Ser	Leu	Leu	Arg	Lys	His	Gln	Glu	Arg	
145					150					155					160	
Val	Gln	Arg	Leu	Lys	Glu	Glu	Cys	Glu	Ala	Gly	Ser	Arg	Glu	Leu	Lys	
165					170					175						
Arg	Cys	Lys	Glu	Glu	Asn	Tyr	Asp	Leu	Ala	Met	Arg	Leu	Ala	His	Gln	
180					185					190						
Ser	Glu	Glu	Lys	Gly	Ala	Ala	Leu	Met	Arg	Asn	Arg	Asp	Leu	Gln	Leu	
195					200					205						
Glu	Ile	Asp	Gln	Leu	Lys	His	Ser	Leu	Met	Lys	Ala	Glu	Asp	Asp	Cys	
210					215					220						
Lys	Val	Glu	Arg	Lys	His	Thr	Leu	Lys	Leu	Arg	His	Ala	Met	Glu	Gln	
225					230					235					240	
Arg	Pro	Ser	Gln	Glu	Leu	Leu	Trp	Glu	Leu	Gln	Gln	Glu	Lys	Ala	Leu	
245					250					255						
Leu	Gln	Ala	Arg	Val	Gln	Glu	Leu	Glu	Ala	Ser	Val	Gln	Glu	Gly	Lys	
260					265					270						

Leu Asp Arg Ser Ser Pro Tyr Ile Gln Val Leu Glu Glu Asp Trp Arg
 275 280 285

Gln Ala Leu Arg Asp His Gln Glu Gln Ala Asn Thr Ile Phe Ser Leu
 290 295 300

Arg Lys Asp Leu Arg Gln Gly Glu Ala Arg Arg Leu Arg Cys Met Glu
 305 310 315 320

Glu Lys Glu Met Phe Glu Leu Gln Cys Leu Ala Leu Arg Lys Asp Ser
 325 330 335

Lys Met Tyr Lys Asp Arg Ile Glu Ala Ile Leu Leu Gln Met Glu Glu
 340 345 350

Val Ala Ile Glu Arg Asp Gln Ala Ile Ala Thr Arg Glu Glu Leu His
 355 360 365

Ala Gln His Ala Arg Gly Leu Gln Glu Lys Asp Ala Leu Arg Lys Gln
 370 375 380

Val Arg Glu Leu Gly Glu Lys Ala Asp Glu Leu Gln Leu Gln Val Phe
 385 390 395 400

Gln Cys Glu Ala Gln Leu Leu Ala Val Glu Gly Arg Leu Arg Arg Gln
 405 410 415

Gln Leu Glu Thr Leu Val Leu Ser Ser Asp Leu Glu Asp Gly Ser Pro
 420 425 430

Arg Arg Ser Gln Glu Leu Ser Leu Pro Gln Asp Leu Glu Asp Thr Gln
 435 440 445

Leu Ser Asp Lys Gly Cys Leu Ala Gly Gly Gly Ser Pro Lys Gln Pro
 450 455 460

Phe Ala Ala Leu His Gln Glu Gln Val Leu Arg Asn Pro His Asp Ala
 465 470 475 480

Gly Pro Ala Gly Leu Pro Gly Ile Gly Ala Val Cys
 485 490

<210> 2953

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2953

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala
 1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr
 20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val
 35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val
 50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser
 65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn
 85 90

<210> 2954

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2954

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Cys Met Thr Ala Leu Thr
 1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
 20 25 30

Arg Pro Arg Phe Leu Trp Gln Leu Lys Phe Glu Cys His Phe Phe Asn
 35 40 45

Gly Thr Glu Arg Val Arg Leu Leu Glu Arg Cys Ile Tyr Asn Gln Glu
 50 55 60

Glu Ser Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr
 100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val Glu Pro Lys Val
 115 120 125

Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205

Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265

<210> 2955

<211> 359

<212> PRT

<213> Homo sapiens

<400> 2955

Met Ala Glu Ala Ile Thr Tyr Ala Asp Leu Arg Phe Val Lys Ala Pro
 1 5 10 15

Leu Lys Lys Ser Ile Ser Ser Arg Leu Gly Gln Asp Pro Gly Ala Asp
 20 25 30

Asp Asp Gly Glu Ile Thr Tyr Glu Asn Val Gln Val Pro Ala Val Leu
 35 40 45

Gly Val Pro Ser Ser Leu Ala Ser Ser Val Leu Gly Asp Lys Ala Ala
50 55 60

Val Lys Ser Glu Gln Pro Thr Ala Ser Trp Arg Ala Val Thr Ser Pro
65 70 75 80

Ala Val Gly Arg Ile Leu Pro Cys Arg Thr Thr Cys Leu Arg Tyr Leu
85 90 95

Leu Leu Gly Leu Leu Leu Thr Cys Leu Leu Leu Gly Val Thr Ala Ile
100 105 110

Cys Leu Gly Val Arg Tyr Leu Gln Val Ser Gln Gln Leu Gln Gln Thr
115 120 125

Asn Arg Val Leu Glu Val Thr Asn Ser Ser Leu Arg Gln Gln Leu Arg
130 135 140

Leu Lys Ile Thr Gln Leu Gly Gln Ser Ala Glu Asp Leu Gln Gly Ser
145 150 155 160

Arg Arg Glu Leu Ala Gln Ser Gln Glu Ala Leu Gln Val Glu Gln Arg
165 170 175

Ala His Gln Ala Ala Glu Gly Gln Leu Gln Ala Cys Gln Ala Asp Arg
180 185 190

Gln Lys Thr Lys Glu Thr Leu Gln Ser Glu Glu Gln Gln Arg Arg Ala
195 200 205

Leu Glu Gln Lys Leu Ser Asn Met Glu Asn Arg Leu Lys Pro Phe Phe
210 215 220

Thr Cys Gly Ser Ala Asp Thr Cys Cys Pro Ser Gly Trp Ile Met His
225 230 235 240

Gln Lys Ser Cys Phe Tyr Ile Ser Leu Thr Ser Lys Asn Trp Gln Glu
245 250 255

Ser Gln Lys Gln Cys Glu Thr Leu Ser Ser Lys Leu Ala Thr Phe Ser
260 265 270

Glu Ile Tyr Pro Gln Ser His Ser Tyr Tyr Phe Leu Asn Ser Leu Leu
275 280 285

Pro Asn Gly Gly Ser Gly Asn Ser Tyr Trp Thr Gly Leu Ser Ser Asn

290

295

300

Lys Asp Trp Lys Leu Thr Asp Asp Thr Gln Arg Thr Arg Thr Tyr Ala
 305 310 315 320

Gln Ser Ser Lys Cys Asn Lys Val His Lys Thr Trp Ser Trp Trp Thr
 325 330 335

Leu Glu Ser Glu Ser Cys Arg Ser Ser Leu Pro Tyr Ile Cys Glu Met
 340 345 350

Thr Ala Phe Arg Phe Pro Asp
 355

<210> 2956

<211> 643

<212> PRT

<213> Homo sapiens

<400> 2956

Met Gln Ala Pro Arg Glu Leu Ala Val Gly Ile Asp Leu Gly Thr Thr
 1 5 10 15

Tyr Ser Cys Val Gly Val Phe Gln Gln Gly Arg Val Glu Ile Leu Ala
 20 25 30

Asn Asp Gln Gly Asn Arg Thr Thr Pro Ser Tyr Val Ala Phe Thr Asp
 35 40 45

Thr Glu Arg Leu Val Gly Asp Ala Ala Lys Ser Gln Ala Ala Leu Asn
 50 55 60

Pro His Asn Thr Val Phe Asp Ala Lys Arg Leu Ile Gly Arg Lys Phe
 65 70 75 80

Ala Asp Thr Thr Val Gln Ser Asp Met Lys His Trp Pro Phe Arg Val
 85 90 95

Val Ser Glu Gly Gly Lys Pro Lys Val Pro Val Ser Tyr Arg Gly Glu
 100 105 110

Asp Lys Thr Phe Tyr Pro Glu Glu Ile Ser Ser Met Val Leu Ser Lys
 115 120 125

Met Lys Glu Thr Ala Glu Ala Tyr Leu Gly Gln Pro Val Lys His Ala
 130 135 140

Val Ile Thr Val Val Pro Ala Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr
 145 150 155 160

Lys Asp Ala Gly Ala Ile Ala Gly Leu Asn Val Leu Arg Ile Ile Asn
 165 170 175

Glu Pro Thr Ala Ala Ala Ile Ala Tyr Gly Leu Asp Arg Arg Gly Ala
 180 185 190

Gly Glu Arg Asn Val Leu Ile Phe Asp Leu Gly Gly Gly Thr Phe Asp
 195 200 205

Val Ser Val Leu Ser Ile Asp Ala Gly Val Phe Glu Val Lys Ala Thr
 210 215 220

Ala Gly Asp Thr His Leu Gly Gly Glu Asp Phe Asp Asn Arg Leu Val
 225 230 235 240

Asn His Phe Met Glu Glu Phe Arg Arg Lys His Gly Lys Asp Leu Ser
 245 250 255

Gly Asn Lys Arg Ala Leu Gly Arg Leu Arg Thr Ala Cys Glu Arg Ala
 260 265 270

Lys Arg Thr Leu Ser Ser Ser Thr Gln Ala Thr Leu Glu Ile Asp Ser
 275 280 285

Leu Phe Glu Gly Val Asp Phe Tyr Thr Ser Ile Thr Arg Ala Arg Phe
 290 295 300

Glu Glu Leu Cys Ser Asp Leu Phe Arg Ser Thr Leu Glu Pro Val Glu
 305 310 315 320

Lys Ala Leu Arg Asp Ala Lys Leu Asp Lys Ala Gln Ile His Asp Val
 325 330 335

Val Leu Val Gly Gly Ser Thr Arg Ile Pro Lys Val Gln Lys Leu Leu
 340 345 350

Gln Asp Phe Phe Asn Gly Lys Glu Leu Asn Lys Ser Ile Asn Pro Asp
 355 360 365

Glu Ala Val Ala Tyr Gly Ala Ala Val Gln Ala Ala Val Leu Met Gly
 370 375 380

Asp Lys Cys Glu Lys Val Gln Asp Leu Leu Leu Asp Val Ala Pro
 385 390 395 400

Leu Ser Leu Gly Leu Glu Thr Ala Gly Gly Val Met Thr Thr Leu Ile
 405 410 415

Gln Arg Asn Ala Thr Ile Pro Thr Lys Gln Thr Gln Thr Phe Thr Thr
 420 425 430

Tyr Ser Asp Asn Gln Pro Gly Val Phe Ile Gln Val Tyr Glu Gly Glu
 435 440 445

Arg Ala Met Thr Lys Asp Asn Asn Leu Leu Gly Arg Phe Glu Leu Ser
 450 455 460

Gly Ile Pro Pro Ala Pro Arg Gly Val Pro Gln Ile Glu Val Thr Phe
 465 470 475 480

Asp Ile Asp Ala Asn Gly Ile Leu Ser Val Thr Ala Thr Asp Arg Ser
 485 490 495

Thr Gly Lys Ala Asn Lys Ile Thr Ile Thr Asn Asp Lys Gly Arg Leu
 500 505 510

Ser Lys Glu Glu Val Glu Arg Met Val His Glu Ala Glu Gln Tyr Lys
 515 520 525

Ala Glu Asp Glu Ala Gln Arg Asp Arg Val Ala Ala Lys Asn Ser Leu
 530 535 540

Glu Ala His Val Phe His Val Lys Gly Ser Leu Gln Glu Glu Ser Leu
 545 550 555 560

Arg Asp Lys Ile Pro Glu Glu Asp Arg Arg Lys Met Gln Asp Lys Cys
 565 570 575

Arg Glu Val Leu Ala Trp Leu Glu His Asn Gln Leu Ala Glu Lys Glu
 580 585 590

Glu Tyr Glu His Gln Lys Arg Glu Leu Glu Gln Ile Cys Arg Pro Ile
 595 600 605

Phe Ser Arg Leu Tyr Gly Gly Pro Gly Val Pro Gly Gly Ser Ser Cys
 610 615 620

Gly Thr Gln Ala Arg Gln Gly Asp Pro Ser Thr Gly Pro Ile Ile Glu

625

630

635

640

Glu Val Asp

<210> 2957

<211> 565

<212> PRT

<213> Homo sapiens

<400> 2957

Met Ala Glu Gly Lys Ala Gly Gly Ala Ala Gly Leu Phe Ala Lys Gln
 1 5 10 15

Val Gln Lys Lys Phe Ser Arg Ala Gln Glu Lys Val Leu Gln Lys Leu
 20 25 30

Gly Lys Ala Val Glu Thr Lys Asp Glu Arg Phe Glu Gln Ser Ala Asn
 35 40 45

Asn Phe Tyr Gln Gln Gln Ala Glu Gly His Lys Leu Tyr Lys Asp Leu
 50 55 60

Lys Asn Phe Leu Ser Ala Val Lys Val Met His Glu Ser Ser Lys Arg
 65 70 75 80

Val Ser Glu Thr Leu Gln Glu Ile Tyr Ser Ser Glu Trp Asp Gly His
 85 90 95

Glu Glu Leu Lys Ala Ile Val Trp Asn Asn Asp Leu Leu Trp Glu Asp
 100 105 110

Tyr Glu Glu Lys Leu Ala Asp Gln Ala Val Arg Thr Met Glu Ile Tyr
 115 120 125

Val Ala Gln Phe Ser Glu Ile Lys Glu Arg Ile Ala Lys Arg Gly Arg
 130 135 140

Lys Leu Val Asp Tyr Asp Ser Ala Arg His His Leu Glu Ala Val Gln
 145 150 155 160

Asn Ala Lys Lys Lys Asp Glu Ala Lys Thr Ala Lys Ala Glu Glu Glu
 165 170 175

Phe Asn Lys Ala Gln Thr Val Phe Glu Asp Leu Asn Gln Glu Leu Leu
 180 185 190

Glu Glu Leu Pro Ile Leu Tyr Asn Ser Arg Ile Gly Cys Tyr Val Thr
 195 200 205
 Ile Phe Gln Asn Ile Ser Asn Leu Arg Asp Val Phe Tyr Arg Glu Met
 210 215 220
 Ser Lys Leu Asn His Asn Leu Tyr Glu Val Met Ser Lys Leu Glu Lys
 225 230 235 240
 Gln His Ser Asn Lys Val Phe Val Val Lys Gly Leu Ser Ser Ser Ser
 245 250 255
 Arg Arg Ser Leu Val Ile Ser Pro Pro Val Arg Thr Ala Thr Val Ser
 260 265 270
 Ser Pro Leu Thr Ser Pro Thr Ser Pro Ser Thr Leu Ser Leu Lys Ser
 275 280 285
 Glu Ser Glu Ser Val Ser Ala Thr Glu Asp Leu Ala Pro Asp Ala Ala
 290 295 300
 Gln Gly Glu Asp Asn Ser Glu Ile Lys Glu Leu Leu Glu Glu Glu Glu
 305 310 315 320
 Ile Glu Lys Glu Gly Ser Glu Ala Ser Ser Ser Glu Glu Asp Glu Pro
 325 330 335
 Leu Pro Ala Cys Asn Gly Pro Ala Gln Ala Gln Pro Ser Pro Thr Thr
 340 345 350
 Glu Arg Ala Lys Ser Gln Glu Glu Val Leu Pro Ser Ser Thr Thr Pro
 355 360 365
 Ser Pro Gly Gly Ala Leu Ser Pro Ser Gly Gln Pro Ser Ser Ser Ala
 370 375 380
 Thr Glu Val Val Leu Arg Thr Arg Thr Ala Ser Glu Gly Ser Glu Gln
 385 390 395 400
 Pro Lys Lys Arg Ala Ser Ile Gln Arg Thr Ser Ala Pro Pro Ser Arg
 405 410 415
 Pro Pro Pro Pro Arg Ala Thr Ala Ser Pro Arg Pro Ser Ser Gly Asn
 420 425 430

Ile Pro Ser Ser Pro Thr Ala Ser Gly Gly Gly Ser Pro Thr Ser Pro
435 440 445

Arg Ala Ser Leu Gly Thr Gly Thr Ala Ser Pro Arg Thr Ser Leu Glu
450 455 460

Val Ser Pro Asn Pro Glu Pro Pro Glu Lys Pro Val Arg Thr Pro Glu
465 470 475 480

Ala Lys Glu Asn Glu Asn Ile His Asn Gln Asn Pro Glu Glu Leu Cys
485 490 495

Thr Ser Pro Thr Leu Met Thr Ser Gln Val Ala Ser Glu Pro Gly Glu
500 505 510

Ala Lys Lys Met Glu Asp Lys Glu Lys Asp Asn Lys Leu Ile Ser Ala
515 520 525

Asp Ser Ser Glu Gly Gln Asp Gln Leu Gln Val Ser Met Val Pro Glu
530 535 540

Asn Asn Asn Leu Thr Ala Pro Glu Pro Gln Glu Glu Val Ser Thr Ser
545 550 555 560

Glu Asn Pro Gln Leu
565

<210> 2958

<211> 349

<212> PRT

<213> Homo sapiens

<400> 2958

Met Glu Thr Pro Pro Val Asn Thr Ile Gly Glu Lys Asp Thr Ser Gln
1 5 10 15

Pro Gln Gln Glu Trp Glu Lys Asn Leu Arg Glu Asn Leu Asp Ser Val
20 25 30

Ile Gln Ile Arg Gln Gln Pro Arg Asp Pro Pro Thr Glu Thr Leu Glu
35 40 45

Leu Glu Val Ser Pro Asp Pro Ala Ser Gln Ile Leu Glu His Thr Gln
50 55 60

Gly Ala Glu Lys Leu Val Ala Glu Leu Glu Gly Asp Ser His Lys Ser
65 70 75 80

His Gly Ser Thr Ser Gln Met Pro Glu Ala Leu Gln Ala Ser Asp Leu
 85 90 95

Trp Tyr Cys Pro Asp Gly Ser Phe Val Lys Lys Ile Val Ile Arg Gly
 100 105 110

His Gly Leu Asp Lys Pro Lys Leu Gly Ser Cys Cys Arg Val Leu Ala
 115 120 125

Leu Gly Phe Pro Phe Gly Ser Gly Pro Pro Glu Gly Trp Thr Glu Leu
 130 135 140

Thr Met Gly Val Gly Pro Trp Arg Glu Glu Thr Trp Gly Glu Leu Ile
 145 150 155 160

Glu Lys Cys Leu Glu Ser Met Cys Gln Gly Glu Glu Ala Glu Leu Gln
 165 170 175

Leu Pro Gly His Ser Gly Pro Pro Val Arg Leu Thr Leu Ala Ser Phe
 180 185 190

Thr Gln Gly Arg Asp Ser Trp Glu Leu Glu Thr Ser Glu Lys Glu Ala
 195 200 205

Leu Ala Arg Glu Glu Arg Ala Arg Gly Thr Glu Leu Phe Arg Ala Gly
 210 215 220

Asn Pro Glu Gly Ala Ala Arg Cys Tyr Gly Arg Ala Leu Arg Leu Leu
 225 230 235 240

Leu Thr Leu Pro Pro Pro Gly Pro Pro Glu Arg Thr Val Leu His Ala
 245 250 255

Asn Leu Ala Ala Cys Gln Leu Leu Leu Gly Gln Pro Gln Leu Ala Ala
 260 265 270

Gln Ser Cys Asp Arg Val Leu Glu Arg Glu Pro Gly His Leu Lys Ala
 275 280

Leu Tyr Arg Arg Gly Val Ala Gln Ala Ala Leu Gly Asn Leu Glu Lys
 290 295 300

Ala Thr Ala Asp Leu Lys Lys Val Leu Ala Ile Asp Pro Lys Asn Arg
 305 310 315 320

Ala Ala Gln Glu Glu Leu Gly Lys Val Val Ile Gln Gly Lys Asn Gln
 325 330 335

Asp Ala Gly Leu Ala Gln Gly Leu Arg Lys Met Phe Gly
 340 345

<210> 2959
 <211> 620
 <212> PRT
 <213> Homo sapiens

<400> 2959

Met Asn Asn Phe Ile Leu Leu Glu Glu Gln Leu Ile Lys Lys Ser Gln
 1 5 10 15

Gln Lys Arg Arg Thr Ser Pro Ser Asn Phe Lys Val Arg Phe Phe Val
 20 25 30

Leu Thr Lys Ala Ser Leu Ala Tyr Phe Glu Asp Arg His Gly Lys Lys
 35 40 45

Arg Thr Leu Lys Gly Ser Ile Glu Leu Ser Arg Ile Lys Cys Val Glu
 50 55 60

Ile Val Lys Ser Asp Ile Ser Ile Pro Cys His Tyr Lys Tyr Pro Phe
 65 70 75 80

Gln Val Val His Asp Asn Tyr Leu Leu Tyr Val Phe Ala Pro Asp Arg
 85 90 95

Glu Ser Arg Gln Arg Trp Val Leu Ala Leu Lys Glu Glu Thr Arg Asn
 100 105 110

Asn Asn Ser Leu Val Pro Lys Tyr His Pro Asn Phe Trp Met Asp Gly
 115 120 125

Lys Trp Arg Cys Cys Ser Gln Leu Glu Lys Leu Ala Thr Gly Cys Ala
 130 135 140

Gln Tyr Asp Pro Thr Lys Asn Ala Ser Lys Lys Pro Leu Pro Pro Thr
 145 150 155 160

Pro Glu Asp Asn Arg Arg Pro Leu Trp Glu Pro Glu Glu Thr Val Val
 165 170 175

Ile Ala Leu Tyr Asp Tyr Gln Thr Asn Asp Pro Gln Glu Leu Ala Leu

180										185										190										
Arg	Arg	Asn	Glu	Glu	Tyr	Cys	Leu	Leu	Asp	Ser	Ser	Glu	Ile	His	Trp															
		195					200					205																		
Trp	Arg	Val	Gln	Asp	Arg	Asn	Gly	His	Glu	Gly	Tyr	Val	Pro	Ser	Ser															
	210					215					220																			
Tyr	Leu	Val	Glu	Lys	Ser	Pro	Asn	Asn	Leu	Glu	Thr	Tyr	Glu	Trp	Tyr															
225					230					235					240															
Asn	Lys	Ser	Ile	Ser	Arg	Asp	Lys	Ala	Glu	Lys	Leu	Leu	Leu	Asp	Thr															
			245						250					255																
Gly	Lys	Glu	Gly	Ala	Phe	Met	Val	Arg	Asp	Ser	Arg	Thr	Ala	Gly	Thr															
			260					265					270																	
Tyr	Thr	Val	Ser	Val	Phe	Thr	Lys	Ala	Val	Val	Ser	Glu	Asn	Asn	Pro															
	275						280					285																		
Cys	Ile	Lys	His	Tyr	His	Ile	Lys	Glu	Thr	Asn	Asp	Asn	Pro	Lys	Arg															
	290					295				300																				
Tyr	Tyr	Val	Ala	Glu	Lys	Tyr	Val	Phe	Asp	Ser	Ile	Pro	Leu	Leu	Ile															
305					310				315						320															
Asn	Tyr	His	Gln	His	Asn	Gly	Gly	Gly	Leu	Val	Thr	Arg	Leu	Arg	Tyr															
			325						330					335																
Pro	Val	Cys	Phe	Gly	Arg	Gln	Lys	Ala	Pro	Val	Thr	Ala	Gly	Leu	Arg															
			340					345					350																	
Tyr	Gly	Lys	Trp	Val	Ile	Asp	Pro	Ser	Glu	Leu	Thr	Phe	Val	Gln	Glu															
	355					360						365																		
Ile	Gly	Ser	Gly	Gln	Phe	Gly	Leu	Val	His	Leu	Gly	Tyr	Trp	Leu	Asn															
	370					375					380																			
Lys	Asp	Lys	Val	Ala	Ile	Lys	Thr	Ile	Arg	Glu	Gly	Ala	Met	Ser	Glu															
385					390					395				400																
Glu	Asp	Phe	Ile	Glu	Glu	Ala	Glu	Val	Met	Met	Lys	Leu	Ser	His	Pro															
			405					410						415																
Lys	Leu	Val	Gln	Leu	Tyr	Gly	Val	Cys	Leu	Glu	Gln	Ala	Pro	Ile	Cys															
		420						425					430																	

Leu Val Phe Glu Phe Met Glu His Gly Cys Leu Ser Asp Tyr Leu Arg
435 440 445

Thr Gln Arg Gly Leu Phe Ala Ala Glu Thr Leu Leu Gly Met Cys Leu
450 455 460

Asp Val Cys Glu Gly Met Ala Tyr Leu Glu Glu Ala Cys Val Ile His
465 470 475 480

Arg Asp Leu Ala Ala Arg Asn Cys Leu Val Gly Glu Asn Gln Val Ile
485 490 495

Lys Val Ser Asp Phe Gly Met Thr Arg Phe Val Leu Asp Asp Gln Tyr
500 505 510

Thr Ser Ser Thr Gly Thr Lys Phe Pro Val Lys Trp Ala Ser Pro Glu
515 520 525

Val Phe Ser Phe Ser Arg Tyr Ser Ser Lys Ser Asp Val Trp Ser Phe
530 535 540

Gly Val Leu Met Trp Glu Val Phe Ser Glu Gly Lys Ile Pro Tyr Glu
545 550 555 560

Asn Arg Ser Asn Ser Glu Val Val Glu Asp Ile Ser Thr Gly Phe Arg
565 570 575

Leu Tyr Lys Pro Arg Leu Ala Ser Thr His Val Tyr Gln Ile Met Asn
580 585 590

His Cys Trp Lys Glu Arg Pro Glu Asp Arg Pro Ala Phe Ser Arg Leu
595 600 605

Leu Arg Gln Leu Ala Glu Ile Ala Glu Ser Gly Leu
610 615 620

<210> 2960

<211> 262

<212> PRT

<213> Homo sapiens

<400> 2960

Met Asp Pro Arg Leu Ser Thr Val Arg Gln Thr Cys Cys Cys Phe Asn
1 5 10 15

Val Arg Ile Ala Thr Thr Ala Leu Ala Ile Tyr His Val Ile Met Ser
 20 25 30

Val Leu Leu Phe Ile Glu His Ser Val Glu Val Ala His Gly Lys Ala
 35 40 45

Ser Cys Lys Leu Ser Gln Met Gly Tyr Leu Arg Ile Ala Asp Leu Ile
 50 55 60

Ser Ser Phe Leu Leu Ile Thr Met Leu Phe Ile Ile Ser Leu Ser Leu
 65 70 75 80

Leu Ile Gly Val Val Lys Asn Arg Glu Lys Tyr Leu Leu Pro Phe Leu
 85 90 95

Ser Leu Gln Ile Met Asp Tyr Leu Leu Cys Leu Leu Thr Leu Leu Gly
 100 105 110

Ser Tyr Ile Glu Leu Pro Ala Tyr Leu Lys Leu Ala Ser Arg Ser Arg
 115 120 125

Ala Ser Ser Ser Lys Phe Pro Leu Met Thr Leu Gln Leu Leu Asp Phe
 130 135 140

Cys Leu Ser Ile Leu Thr Leu Cys Ser Ser Tyr Met Glu Val Pro Thr
 145 150 155 160

Tyr Leu Asn Phe Lys Ser Met Asn His Met Asn Tyr Leu Pro Ser Gln
 165 170 175

Glu Asp Met Pro His Asn Gln Phe Ile Lys Met Met Ile Ile Phe Ser
 180 185 190

Ile Ala Phe Ile Thr Val Leu Ile Phe Lys Val Tyr Met Phe Lys Cys
 195 200 205

Val Trp Arg Cys Tyr Arg Leu Ile Lys Cys Met Asn Ser Val Glu Glu
 210 215 220

Lys Arg Asn Ser Lys Met Leu Gln Lys Val Val Leu Pro Ser Tyr Glu
 225 230 235 240

Glu Ala Leu Ser Leu Pro Ser Lys Thr Pro Glu Gly Gly Pro Ala Pro
 245 250 255

Pro Pro Tyr Ser Glu Val

260

<210> 2961
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 2961

Met Gln Met Asp Asn Arg Leu Pro Pro Lys Lys Val Pro Gly Phe Cys
 1 5 10 15

Ser Phe Arg Tyr Gly Leu Ser Phe Leu Val His Cys Cys Asn Val Ile
 20 25 30

Ile Thr Ala Gln Arg Ala Cys Leu Asn Leu Thr Met Val Val Met Val
 35 40 45

Asn Ser Thr Asp Pro His Gly Leu Pro Asn Thr Ser Thr Lys Lys Leu
 50 55 60

Leu Asp Asn Ile Lys Asn Pro Met Tyr Asn Trp Ser Pro Asp Ile Gln
 65 70 75 80

Gly Ile Ile Leu Ser Ser Thr Ser Tyr Gly Val Ile Ile Ile Gln Val
 85 90 95

Pro Val Gly Tyr Phe Ser Gly Ile Tyr Ser Thr Lys Lys Met Ile Gly
 100 105 110

Phe Ala Leu Cys Leu Ser Ser Val Leu Ser Leu Leu Ile Pro Pro Ala
 115 120 125

Ala Gly Ile Gly Val Ala Trp Val Val Val Cys Arg Ala Val Gln Gly
 130 135 140

Ala Ala Gln Gly Ile Val Ala Thr Ala Gln Phe Glu Ile Tyr Val Lys
 145 150 155 160

Trp Ala Pro Pro Leu Glu Arg Gly Arg Leu Thr Ser Met Ser Thr Ser
 165 170 175

Gly Phe Leu Leu Gly Pro Phe Ile Val Leu Leu Val Thr Gly Val Ile
 180 185 190

Cys Glu Ser Leu Gly Trp Pro Met Val Phe Tyr Ile Phe Gly Ala Cys
 195 200 205

Gly Cys Ala Val Cys Leu Leu Trp Phe Val Leu Phe Tyr Asp Asp Pro
 210 215 220

Lys Asp His Pro Cys Ile Ser Ile Ser Glu Lys Glu Tyr Ile Thr Ser
 225 230 235 240

Ser Leu Val Gln Gln Val Ser Ser Ser Arg Gln Ser Leu Pro Ile Lys
 245 250 255

Ala Ile Leu Lys Ser Leu Pro Val Trp Ala Ile Ser Ile Gly Ser Phe
 260 265 270

Thr Phe Phe Trp Ser His Asn Ile Met Thr Leu Tyr Thr Pro Met Phe
 275 280 285

Ile Asn Ser Met Leu His Val Asn Ile Lys Glu Asn Gly Phe Leu Ser
 290 295 300

Ser Leu Pro Tyr Leu Phe Ala Trp Ile Cys Gly Asn Leu Ala Gly Gln
 305 310 315 320

Leu Ser Asp Phe Phe Leu Thr Arg Asn Ile Leu Ser Val Ile Ala Val
 325 330 335

Arg Lys Leu Phe Thr Ala Ala Gly Phe Leu Leu Pro Ala Ile Phe Gly
 340 345 350

Val Cys Leu Pro Tyr Leu Ser Ser Thr Phe Tyr Ser Ile Val Ile Phe
 355 360 365

Leu Ile Leu Ala Gly Ala Thr Gly Ser Phe Cys Leu Gly Gly Val Phe
 370 375 380

Ile Asn Gly Leu Asp Ile Ala Pro Arg Tyr Phe Gly Phe Ile Lys Ala
 385 390 395 400

Cys Ser Thr Leu Thr Gly Met Ile Gly Gly Leu Ile Ala Ser Thr Leu
 405 410 415

Thr Gly Leu Ile Leu Lys Gln Asp Pro Glu Ser Ala Trp Phe Lys Thr
 420 425 430

Phe Ile Leu Met Ala Ala Ile Asn Val Thr Gly Leu Ile Phe Tyr Leu
 435 440 445

Ile Val Ala Thr Ala Glu Ile Gln Asp Trp Ala Lys Glu Lys Gln His
 450 455 460

Thr Arg Leu
 465

<210> 2962
 <211> 444
 <212> PRT
 <213> Homo sapiens

<400> 2962

Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Leu Gly Leu Gln
 1 5 10 15

Gly Cys Leu Ala Ala Val Phe Val Thr Gln Glu Glu Ala His Gly Val
 20 25 30

Leu His Arg Arg Arg Arg Ala Asn Ala Phe Leu Glu Glu Leu Arg Pro
 35 40 45

Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu Gln Cys Ser Phe Glu Glu
 50 55 60

Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile
 65 70 75 80

Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly
 85 90 95

Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro
 100 105 110

Ala Phe Glu Gly Arg Asn Cys Glu Thr His Lys Asp Asp Gln Leu Ile
 115 120 125

Cys Val Asn Glu Asn Gly Gly Cys Glu Gln Tyr Cys Ser Asp His Thr
 130 135 140

Gly Thr Lys Arg Ser Cys Arg Cys His Glu Gly Tyr Ser Leu Leu Ala
 145 150 155 160

Asp Gly Val Ser Cys Thr Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile
 165 170 175

Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys Pro Gln Gly Arg Ile Val
 180 185 190

Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp Gln Val Leu Leu
 195 200 205

Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile
 210 215 220

Trp Val Val Ser Ala Ala His Cys Phe Asp Lys Ile Lys Asn Trp Arg
 225 230 235 240

Asn Leu Ile Ala Val Leu Gly Glu His Asp Leu Ser Glu His Asp Gly
 245 250 255

Asp Glu Gln Ser Arg Arg Val Ala Gln Val Ile Ile Pro Ser Thr Tyr
 260 265 270

Val Pro Gly Thr Thr Asn His Asp Ile Ala Leu Leu Arg Leu His Gln
 275 280 285

Pro Val Val Leu Thr Asp His Val Val Pro Leu Cys Leu Pro Glu Arg
 290 295 300

Thr Phe Ser Glu Arg Thr Leu Ala Phe Val Arg Phe Ser Leu Val Ser
 305 310 315 320

Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala Thr Ala Leu Glu Leu Met
 325 330 335

Val Leu Asn Val Pro Arg Leu Met Thr Gln Asp Cys Leu Gln Gln Ser
 340 345 350

Arg Lys Val Gly Asp Ser Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala
 355 360 365

Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly
 370 375 380

Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val
 385 390 395 400

Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val Tyr Thr
 405 410 415

Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln Lys Leu Met Arg Ser Glu
 420 425 430

Pro Arg Pro Gly Val Leu Leu Arg Ala Pro Phe Pro
 435 440

<210> 2963
 <211> 272
 <212> PRT
 <213> Homo sapiens

<400> 2963

Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp Tyr Arg Gln
 1 5 10 15

Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn Asn Asn Val
 20 25 30

Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser Ala Lys Met
 35 40 45

Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser Glu Pro Arg
 50 55 60

Asp Ser Ala Val Tyr Phe Cys Ala Ser Ser Phe Ser Thr Cys Ser Ala
 65 70 75 80

Asn Tyr Gly Tyr Thr Phe Gly Ser Gly Thr Arg Leu Thr Val Val Glu
 85 90 95

Asp Leu Asn Lys Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser
 100 105 110

Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala
 115 120 125

Thr Gly Phe Phe Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly
 130 135 140

Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu
 145 150 155 160

Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg
 165 170 175

Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln
 180 185 190

Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg

195

200

205

Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg Ala
 210 215 220

Asp Cys Gly Phe Thr Ser Val Ser Tyr Gln Gln Gly Val Leu Ser Ala
 225 230 235 240

Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val
 245 250 255

Leu Val Ser Ala Leu Val Leu Met Ala Met Val Lys Arg Lys Asp Phe
 260 265 270

<210> 2964

<211> 276

<212> PRT

<213> Homo sapiens

<400> 2964

Met Tyr Arg Ile Ser Gln Leu Met Ser Thr Pro Val Ala Ser Ser Ser
 1 5 10 15

Arg Leu Glu Arg Glu Tyr Ala Gly Glu Leu Ser Pro Thr Cys Ile Phe
 20 25 30

Pro Ser Phe Thr Cys Asp Ser Leu Asp Gly Tyr His Ser Phe Glu Cys
 35 40 45

Gly Ser Ile Asp Pro Leu Thr Gly Ser His Tyr Thr Cys Arg Arg Ser
 50 55 60

Pro Arg Leu Leu Thr Asn Gly Tyr Tyr Ile Trp Thr Glu Asp Ser Phe
 65 70 75 80

Leu Cys Asp Lys Asp Gly Asn Ile Thr Leu Asn Pro Ser Gln Thr Ser
 85 90 95

Val Met Tyr Lys Glu Asn Leu Val Ser Thr Ser Lys Ser Trp Leu His
 100 105 110

Gly Ser Ile Phe Gly Asp Ile Asn Ser Ser Pro Ser Glu Asp Asn Trp
 115 120 125

Leu Lys Gly Thr Arg Arg Leu Asp Thr Asp His Cys Asn Gly Asn Ala
 130 135 140

Asp Asp Leu Asp Cys Ser Ser Leu Thr Asp Asp Trp Glu Ser Gly Lys
 145 150 155 160

Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 165 170 175

Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 180 185 190

Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 195 200 205

Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 210 215 220

Leu Ile Thr Ser Ala Cys Ala Arg Trp Phe Met Gly Glu Ile Leu Ala
 225 230 235 240

Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 245 250 255

Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 260 265 270

Phe Val Lys Ile
 275

<210> 2965

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2965

Met Val Leu Gln Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser
 1 5 10 15

Gly Ala Tyr Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala
 20 25 30

Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser
 35 40 45

Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
 50 55 60

Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg

65

70

75

80

Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 85 90 95

Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
 100 105 110

Tyr Cys Gln Gln Tyr Asp Thr Ile Pro Thr Phe Gly Gly Gly Thr Lys
 115 120 125

Val Glu Ile Lys Arg
 130

<210> 2966

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2966

Met Leu Lys Pro Ser Leu Pro Phe Thr Ser Leu Leu Phe Leu Gln Leu
 1 5 10 15

Pro Leu Leu Gly Val Gly Leu Asn Thr Thr Ile Leu Thr Pro Asn Gly
 20 25 30

Asn Glu Asp Thr Thr Ala Asp Phe Phe Leu Thr Thr Met Pro Thr Asp
 35 40 45

Ser Leu Ser Val Ser Thr Leu Pro Leu Pro Glu Val Gln Cys Phe Val
 50 55 60

Phe Asn Val Glu Tyr Met Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro
 65 70 75 80

Gln Pro Thr Asn Leu Thr Leu His Tyr Trp Tyr Lys Asn Ser Asp Asn
 85 90 95

Asp Lys Val Gln Lys Cys Ser His Tyr Leu Phe Ser Glu Glu Ile Thr
 100 105 110

Ser Gly Cys Gln Leu Gln Lys Lys Glu Ile His Leu Tyr Gln Thr Phe
 115 120 125

Val Val Gln Leu Gln Asp Pro Arg Glu Pro Arg Arg Gln Ala Thr Gln
 130 135 140

Met Leu Lys Leu Gln Asn Leu Val Ile Pro Trp Ala Pro Glu Asn Leu
 145 150 155 160

Thr Leu His Lys Leu Ser Glu Ser Gln Leu Glu Leu Asn Trp Asn Asn
 165 170 175

Arg Phe Leu Asn His Cys Leu Glu His Leu Val Gln Tyr Arg Thr Asp
 180 185 190

Trp Asp His Ser Trp Thr Glu Gln Ser Val Asp Tyr Arg His Lys Phe
 195 200 205

Ser Leu Pro Ser Val Asp Gly Gln Lys Arg Tyr Thr Phe Arg Val Arg
 210 215 220

Ser Arg Phe Asn Pro Leu Cys Gly Ser Ala Gln His Trp Ser Glu Trp
 225 230 235 240

Ser His Pro Ile His Trp Gly Ser Asn Thr Ser Lys Glu Asn Pro Phe
 245 250 255

Leu Phe Ala Leu Glu Ala Val Val Ile Ser Val Gly Ser Met Gly Leu
 260 265 270

Ile Ile Ser Leu Leu Cys Val Tyr Phe Trp Leu Glu Arg Thr Met Pro
 275 280 285

Arg Ile Pro Thr Leu Lys Asn Leu Glu Asp Leu Val Thr Glu Tyr His
 290 295 300

Gly Asn Phe Ser Ala Trp Ser Gly Val Ser Lys Gly Leu Ala Glu Ser
 305 310 315 320

Leu Gln Pro Asp Tyr Ser Glu Arg Leu Cys Leu Val Ser Glu Ile Pro
 325 330 335

Pro Lys Gly Gly Ala Leu Gly Glu Gly Pro Gly Ala Ser Pro Cys Asn
 340 345 350

Gln His Ser Pro Tyr Trp Ala Pro Pro Cys Tyr Thr Leu Lys Pro Glu
 355 360 365

Thr

<210> 2967
 <211> 323
 <212> PRT
 <213> Homo sapiens

<400> 2967

Met Ala Phe Ser Gly Ser Gln Ala Pro Tyr Leu Ser Pro Ala Val Pro
 1 5 10 15

Phe Ser Gly Thr Ile Gln Gly Gly Leu Gln Asp Gly Leu Gln Ile Thr
 20 25 30

Val Asn Gly Thr Val Leu Ser Ser Ser Gly Thr Arg Phe Ala Val Asn
 35 40 45

Phe Gln Thr Gly Phe Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro
 50 55 60

Arg Phe Glu Asp Gly Gly Tyr Val Val Cys Asn Thr Arg Gln Asn Gly
 65 70 75 80

Ser Trp Gly Pro Glu Glu Arg Arg Thr His Met Pro Phe Gln Lys Gly
 85 90 95

Met Pro Phe Asp Leu Cys Phe Leu Val Gln Ser Ser Asp Phe Lys Val
 100 105 110

Met Val Asn Gly Ile Leu Phe Val Gln Tyr Phe His Arg Val Pro Phe
 115 120 125

His Arg Val Asp Thr Ile Phe Val Asn Gly Ser Val Gln Leu Ser Tyr
 130 135 140

Ile Ser Phe Gln Pro Pro Gly Val Trp Pro Ala Asn Pro Ala Pro Ile
 145 150 155 160

Thr Gln Thr Val Ile His Thr Val Gln Ser Ala Pro Gly Gln Met Phe
 165 170 175

Ser Thr Pro Ala Ile Pro Pro Met Met Tyr Pro His Pro Ala Tyr Pro
 180 185 190

Met Pro Phe Ile Thr Thr Ile Leu Gly Gly Leu Tyr Pro Ser Lys Ser
 195 200 205

Ile Leu Leu Ser Gly Thr Val Leu Pro Ser Ala Gln Arg Phe His Ile
 210 215 220

Asn Leu Cys Ser Gly Asn His Ile Ala Phe His Leu Asn Leu Arg Phe
 225 230 235 240

Asp Glu Asn Ala Val Val Arg Asn Thr Gln Ile Asp Asn Ser Trp Gly
 245 250 255

Ser Glu Glu Arg Ser Leu Pro Arg Lys Met Pro Phe Val Arg Gly Gln
 260 265 270

Ser Phe Ser Val Trp Ile Leu Cys Gly Ala His Cys Leu Lys Val Ala
 275 280 285

Val Asp Gly Gln His Leu Phe Glu Tyr Tyr His Arg Leu Arg Asn Leu
 290 295 300

Pro Thr Ile Asn Arg Leu Glu Val Gly Gly Asp Ile Gln Leu Thr His
 305 310 315 320

Val Gln Thr

<210> 2968
 <211> 1866
 <212> PRT
 <213> Homo sapiens

<400> 2968

Met Asp Pro Val Gly Leu Gln Leu Gly Asn Lys Asn Leu Trp Ser Cys
 1 5 10 15

Leu Val Arg Leu Leu Thr Lys Asp Pro Glu Trp Leu Asn Ala Lys Met
 20 25 30

Lys Phe Phe Leu Pro Asn Thr Asp Leu Asp Ser Arg Asn Glu Thr Leu
 35 40 45

Asp Pro Glu Gln Arg Val Ile Leu Gln Leu Asn Lys Leu His Val Gln
 50 55 60

Gly Ser Asp Thr Trp Gln Ser Phe Ile His Cys Val Cys Met Gln Leu
 65 70 75 80

Glu Val Pro Leu Asp Leu Glu Val Leu Leu Ser Thr Phe Gly Tyr
 85 90 95

Asp Asp Gly Phe Thr Ser Gln Leu Gly Ala Glu Gly Lys Ser Gln Pro
 100 105 110

Glu Ser Gln Leu His His Gly Leu Lys Arg Pro His Gln Ser Cys Gly
 115 120 125

Ser Ser Pro Arg Arg Lys Gln Cys Lys Lys Gln Gln Leu Glu Leu Ala
 130 135 140

Lys Lys Tyr Leu Gln Leu Leu Arg Thr Ser Ala Gln Gln Arg Tyr Arg
 145 150 155 160

Ser Gln Ile Pro Gly Ser Gly Gln Pro His Ala Phe His Gln Val Tyr
 165 170 175

Val Pro Pro Ile Leu Arg Arg Ala Thr Ala Ser Leu Asp Thr Pro Glu
 180 185 190

Gly Ala Ile Met Gly Asp Val Lys Val Glu Asp Gly Ala Asp Val Ser
 195 200 205

Ile Ser Asp Leu Phe Asn Thr Arg Val Asn Lys Gly Pro Arg Val Thr
 210 215 220

Val Leu Leu Gly Lys Ala Gly Met Gly Lys Thr Thr Leu Ala His Arg
 225 230 235 240

Leu Cys Gln Lys Trp Ala Glu Gly His Leu Asn Cys Phe Gln Ala Leu
 245 250 255

Phe Leu Phe Glu Phe Arg Gln Leu Asn Leu Ile Thr Arg Phe Leu Thr
 260 265 270

Pro Ser Glu Leu Leu Phe Asp Leu Tyr Leu Ser Pro Glu Ser Asp His
 275 280 285

Asp Thr Val Phe Gln Tyr Leu Glu Lys Asn Ala Asp Gln Val Leu Leu
 290 295 300

Ile Phe Asp Gly Leu Asp Glu Ala Leu Gln Pro Met Gly Pro Asp Gly
 305 310 315 320

Pro Gly Pro Val Leu Thr Leu Phe Ser His Leu Cys Asn Gly Thr Leu
 325 330 335

Leu Pro Gly Cys Arg Val Met Ala Thr Ser Arg Pro Gly Lys Leu Pro

340	345	350
Ala Cys Leu Pro Ala Glu Ala Ala Met Val His Met Leu Gly Phe Asp 355	360	365
Gly Pro Arg Val Glu Glu Tyr Val Asn His Phe Phe Ser Ala Gln Pro 370	375	380
Ser Arg Glu Gly Ala Leu Val Glu Leu Gln Thr Asn Gly Arg Leu Arg 385	390	395
Ser Leu Cys Ala Val Pro Ala Leu Cys Gln Val Ala Cys Leu Cys Leu 405	410	415
His His Leu Leu Pro Asp His Ala Pro Gly Gln Ser Val Ala Leu Leu 420	425	430
Pro Asn Met Thr Gln Leu Tyr Met Gln Met Val Leu Ala Leu Ser Pro 435	440	445
Pro Gly His Leu Pro Thr Ser Ser Leu Leu Asp Leu Gly Glu Val Ala 450	455	460
Leu Arg Gly Leu Glu Thr Gly Lys Val Ile Phe Tyr Ala Lys Asp Ile 465	470	475
Ala Pro Pro Leu Ile Ala Phe Gly Ala Thr His Ser Leu Leu Thr Ser 485	490	495
Phe Cys Val Cys Thr Gly Pro Gly His Gln Gln Thr Gly Tyr Ala Phe 500	505	510
Thr His Leu Ser Leu Gln Glu Phe Leu Ala Ala Leu His Leu Met Ala 515	520	525
Ser Pro Lys Val Asn Lys Asp Thr Leu Thr Gln Tyr Val Thr Leu His 530	535	540
Ser Arg Trp Val Gln Arg Thr Lys Ala Arg Leu Gly Leu Ser Asp His 545	550	555
Leu Pro Thr Phe Leu Ala Gly Leu Ala Ser Cys Thr Cys Arg Pro Phe 565	570	575
Leu Ser His Leu Ala Gln Gly Asn Glu Asp Cys Val Gly Ala Lys Gln 580	585	590

Ala Ala Val Val Gln Val Leu Lys Lys Leu Ala Thr Arg Lys Leu Thr
595 600 605

Gly Pro Lys Val Val Glu Leu Cys His Cys Val Asp Glu Thr Gln Glu
610 615 620

Pro Glu Leu Ala Ser Leu Thr Ala Gln Ser Leu Pro Tyr Gln Leu Pro
625 630 635 640

Phe His Asn Phe Pro Leu Thr Cys Thr Asp Leu Ala Thr Leu Thr Asn
645 650 655

Ile Leu Glu His Arg Glu Ala Pro Ile His Leu Asp Phe Asp Gly Cys
660 665 670

Pro Leu Glu Pro His Cys Pro Glu Ala Leu Val Gly Cys Gly Gln Ile
675 680 685

Glu Asn Leu Ser Phe Lys Ser Arg Lys Cys Gly Asp Ala Phe Ala Glu
690 695 700

Ala Leu Ser Arg Ser Leu Pro Thr Met Gly Arg Leu Gln Met Leu Gly
705 710 715 720

Leu Ala Gly Ser Lys Ile Thr Ala Arg Gly Ile Ser His Leu Val Lys
725 730 735

Ala Leu Pro Leu Cys Pro Gln Leu Lys Glu Val Ser Phe Arg Asp Asn
740 745 750

Gln Leu Ser Asp Gln Val Val Leu Asn Ile Val Glu Val Leu Pro His
755 760 765

Leu Pro Arg Leu Arg Lys Leu Asp Leu Ser Ser Asn Ser Ile Cys Val
770 775 780

Ser Thr Leu Leu Cys Leu Ala Arg Val Ala Val Thr Cys Pro Thr Val
785 790 795 800

Arg Met Leu Gln Ala Arg Glu Arg Thr Ile Ile Phe Leu Leu Ser Pro
805 810 815

Pro Thr Glu Thr Thr Ala Glu Leu Gln Arg Ala Pro Asp Leu Gln Glu
820 825 830

Ser Asp Gly Gln Arg Lys Gly Ala Gln Ser Arg Ser Leu Thr Leu Arg
 835 840 845

Leu Gln Lys Cys Gln Leu Gln Val His Asp Ala Glu Ala Leu Ile Ala
 850 855 860

Leu Leu Gln Glu Gly Pro His Leu Glu Glu Val Asp Leu Ser Gly Asn
 865 870 875 880

Gln Leu Glu Asp Glu Gly Cys Arg Leu Met Ala Glu Ala Ala Ser Gln
 885 890 895

Leu His Ile Ala Arg Lys Leu Asp Leu Ser Asp Asn Gly Leu Ser Val
 900 905 910

Ala Gly Val His Cys Val Leu Arg Ala Val Ser Ala Cys Trp Thr Leu
 915 920 925

Ala Glu Leu His Ile Ser Leu Gln His Lys Thr Val Ile Phe Met Phe
 930 935 940

Ala Gln Glu Pro Glu Glu Gln Lys Gly Pro Gln Glu Arg Ala Ala Phe
 945 950 955 960

Leu Asp Ser Leu Met Leu Gln Met Pro Ser Glu Leu Pro Leu Ser Ser
 965 970 975

Arg Arg Met Arg Leu Thr His Cys Gly Leu Gln Glu Lys His Leu Glu
 980 985 990

Gln Leu Cys Lys Ala Leu Gly Gly Ser Cys His Leu Gly His Leu His
 995 1000 1005

Leu Asp Phe Ser Gly Asn Ala Leu Gly Asp Glu Gly Ala Ala Arg
 1010 1015 1020

Leu Ala Gln Leu Leu Pro Gly Leu Gly Ala Leu Gln Ser Leu Asn
 1025 1030 1035

Leu Ser Glu Asn Gly Leu Ser Leu Asp Ala Val Leu Gly Leu Val
 1040 1045 1050

Arg Cys Phe Ser Thr Leu Gln Trp Leu Phe Arg Leu Asp Ile Ser
 1055 1060 1065

Phe Glu Ser Gln His Ile Leu Leu Arg Gly Asp Lys Thr Ser Arg
 1070 1075 1080

Asp Met Trp Ala Thr Gly Ser Leu Pro Asp Phe Pro Ala Ala Ala
 1085 1090 1095

Lys Phe Leu Gly Phe Arg Gln Arg Cys Ile Pro Arg Ser Leu Cys
 1100 1105 1110

Leu Ser Glu Cys Pro Leu Glu Pro Pro Ser Leu Thr Arg Leu Cys
 1115 1120 1125

Ala Thr Leu Lys Asp Cys Pro Gly Pro Leu Glu Leu Gln Leu Ser
 1130 1135 1140

Cys Glu Phe Leu Ser Asp Gln Ser Leu Glu Thr Leu Leu Asp Cys
 1145 1150 1155

Leu Pro Gln Leu Pro Gln Leu Ser Leu Leu Gln Leu Ser Gln Thr
 1160 1165 1170

Gly Leu Ser Pro Lys Ser Pro Phe Leu Leu Ala Asn Thr Leu Ser
 1175 1180 1185

Leu Cys Pro Arg Val Lys Lys Val Asp Leu Arg Ser Leu His His
 1190 1195 1200

Ala Thr Leu His Phe Arg Ser Asn Glu Glu Glu Glu Gly Val Cys
 1205 1210 1215

Cys Gly Arg Phe Thr Gly Cys Ser Leu Ser Gln Glu His Val Glu
 1220 1225 1230

Ser Leu Cys Trp Leu Leu Ser Lys Cys Lys Asp Leu Ser Gln Val
 1235 1240 1245

Asp Leu Ser Ala Asn Leu Leu Gly Asp Ser Gly Leu Arg Cys Leu
 1250 1255 1260

Leu Glu Cys Leu Pro Gln Val Pro Ile Ser Gly Leu Leu Asp Leu
 1265 1270 1275

Ser His Asn Ser Ile Ser Gln Glu Ser Ala Leu Tyr Leu Leu Glu
 1280 1285 1290

Thr Leu Pro Ser Cys Pro Arg Val Arg Glu Ala Ser Val Asn Leu

1295	1300	1305
Gly Ser Glu Gln Ser Phe Arg	Ile His Phe Ser Arg	Glu Asp Gln
1310	1315	1320
Ala Gly Lys Thr Leu Arg Leu	Ser Glu Cys Ser Phe	Arg Pro Glu
1325	1330	1335
His Val Ser Arg Leu Ala Thr	Gly Leu Ser Lys Ser	Leu Gln Leu
1340	1345	1350
Thr Glu Leu Thr Leu Thr Gln	Cys Cys Leu Gly Gln	Lys Gln Leu
1355	1360	1365
Ala Ile Leu Leu Ser Leu Val	Gly Arg Pro Ala Gly	Leu Phe Ser
1370	1375	1380
Leu Arg Val Gln Glu Pro Trp	Ala Asp Arg Ala Arg	Val Leu Ser
1385	1390	1395
Leu Leu Glu Val Cys Ala Gln	Ala Ser Gly Ser Val	Thr Glu Ile
1400	1405	1410
Ser Ile Ser Glu Thr Gln Gln	Gln Leu Cys Val Gln	Leu Glu Phe
1415	1420	1425
Pro Arg Gln Glu Glu Asn Pro	Glu Ala Val Ala Leu	Arg Leu Ala
1430	1435	1440
His Cys Asp Leu Gly Ala His	His Ser Leu Leu Val	Gly Gln Leu
1445	1450	1455
Met Glu Thr Cys Ala Arg Leu	Gln Gln Leu Ser Leu	Ser Gln Val
1460	1465	1470
Asn Leu Cys Glu Asp Asp Asp	Ala Ser Ser Leu Leu	Leu Gln Ser
1475	1480	1485
Leu Leu Leu Ser Leu Ser Glu	Leu Lys Thr Phe Arg	Leu Thr Ser
1490	1495	1500
Ser Cys Val Ser Thr Glu Gly	Leu Ala His Leu Ala	Ser Gly Leu
1505	1510	1515
Gly His Cys His His Leu Glu	Glu Leu Asp Leu Ser	Asn Asn Gln
1520	1525	1530

Phe Asp	Glu Glu Gly Thr	Lys	Ala Leu Met Arg	Ala	Leu Glu Gly
1535		1540		1545	
Lys Trp	Met Leu Lys Arg	Leu	Asp Leu Ser His	Leu	Leu Leu Asn
1550		1555		1560	
Ser Ser	Thr Leu Ala Leu	Leu	Thr His Arg Leu	Ser	Gln Met Thr
1565		1570		1575	
Cys Leu	Gln Ser Leu Arg	Leu	Asn Arg Asn Ser	Ile	Gly Asp Val
1580		1585		1590	
Gly Cys	Cys His Leu Ser	Glu	Ala Leu Arg Ala	Ala	Thr Ser Leu
1595		1600		1605	
Glu Glu	Leu Asp Leu Ser	His	Asn Gln Ile Gly	Asp	Ala Gly Val
1610		1615		1620	
Gln His	Leu Ala Thr Ile	Leu	Pro Gly Leu Pro	Glu	Leu Arg Lys
1625		1630		1635	
Ile Asp	Leu Ser Gly Asn	Ser	Ile Ser Ser Ala	Gly	Gly Val Gln
1640		1645		1650	
Leu Ala	Glu Ser Leu Val	Leu	Cys Arg Arg Leu	Glu	Glu Leu Met
1655		1660		1665	
Leu Gly	Cys Asn Ala Leu	Gly	Asp Pro Thr Ala	Leu	Gly Leu Ala
1670		1675		1680	
Gln Glu	Leu Pro Gln His	Leu	Arg Val Leu His	Leu	Pro Phe Ser
1685		1690		1695	
His Leu	Gly Pro Gly Gly	Ala	Leu Ser Leu Ala	Gln	Ala Leu Asp
1700		1705		1710	
Gly Ser	Pro His Leu Glu	Glu	Ile Ser Leu Ala	Glu	Asn Asn Leu
1715		1720		1725	
Ala Gly	Gly Val Leu Arg	Phe	Cys Met Glu Leu	Pro	Leu Leu Arg
1730		1735		1740	
Gln Ile	Asp Leu Val Ser	Cys	Lys Ile Asp Asn	Gln	Thr Ala Lys
1745		1750		1755	

Leu Leu Thr Ser Ser Phe Thr Ser Cys Pro Ala Leu Glu Val Ile
1760 1765 1770

Leu Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu
1775 1780 1785

Ala Gln Val Leu Pro Lys Met Gly Arg Leu Lys Arg Val Asp Leu
1790 1795 1800

Glu Lys Asn Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu
1805 1810 1815

Gly Leu Ala Gln Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn
1820 1825 1830

Asn Pro Ile Pro Cys Asp Met Ala Gln His Leu Lys Ser Gln Glu
1835 1840 1845

Pro Arg Leu Asp Phe Ala Phe Phe Asp Asn Gln Pro Gln Ala Pro
1850 1855 1860

Trp Gly Thr
1865

<210> 2969

<211> 547

<212> PRT

<213> Homo sapiens

<400> 2969

Met Ala Thr Met Val Pro Ser Val Leu Trp Pro Arg Ala Cys Trp Thr
1 5 10 15

Leu Leu Val Cys Cys Leu Leu Thr Pro Gly Val Gln Gly Gln Glu Phe
20 25 30

Leu Leu Arg Val Glu Pro Gln Asn Pro Val Leu Ser Ala Gly Gly Ser
35 40 45

Leu Phe Val Asn Cys Ser Thr Asp Cys Pro Ser Ser Glu Lys Ile Ala
50 55 60

Leu Glu Thr Ser Leu Ser Lys Glu Leu Val Ala Ser Gly Met Gly Trp
65 70 75 80

Ala Ala Phe Asn Leu Ser Asn Val Thr Gly Asn Ser Arg Ile Leu Cys

85

90

95

Ser Val Tyr Cys Asn Gly Ser Gln Ile Thr Gly Ser Ser Asn Ile Thr
 100 105 110

Val Tyr Gly Leu Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Pro Trp
 115 120 125

Gln Pro Val Gly Gln Asn Phe Thr Leu Arg Cys Gln Val Glu Gly Gly
 130 135 140

Ser Pro Arg Thr Ser Leu Thr Val Val Leu Leu Arg Trp Glu Glu Glu
 145 150 155 160

Leu Ser Arg Gln Pro Ala Val Glu Glu Pro Ala Glu Val Thr Ala Thr
 165 170 175

Val Leu Ala Ser Arg Asp Asp His Gly Ala Pro Phe Ser Cys Arg Thr
 180 185 190

Glu Leu Asp Met Gln Pro Gln Gly Leu Gly Leu Phe Val Asn Thr Ser
 195 200 205

Ala Pro Arg Gln Leu Arg Thr Phe Val Leu Pro Val Thr Pro Pro Arg
 210 215 220

Leu Val Ala Pro Arg Phe Leu Glu Val Glu Thr Ser Trp Pro Val Asp
 225 230 235 240

Cys Thr Leu Asp Gly Leu Phe Pro Ala Ser Glu Ala Gln Val Tyr Leu
 245 250 255

Ala Leu Gly Asp Gln Met Leu Asn Ala Thr Val Met Asn His Gly Asp
 260 265 270

Thr Leu Thr Ala Thr Ala Thr Ala Thr Ala Arg Ala Asp Gln Glu Gly
 275 280 285

Ala Arg Glu Ile Val Cys Asn Val Thr Leu Gly Gly Glu Arg Arg Glu
 290 295 300

Ala Arg Glu Asn Leu Thr Val Phe Ser Phe Leu Gly Pro Ile Val Asn
 305 310 315 320

Leu Ser Glu Pro Thr Ala His Glu Gly Ser Thr Val Thr Val Ser Cys
 325 330 335

Met Ala Gly Ala Arg Val Gln Val Thr Leu Asp Gly Val Pro Ala Ala
 340 345 350

Ala Pro Gly Gln Pro Ala Gln Leu Gln Leu Asn Ala Thr Glu Ser Asp
 355 360 365

Asp Gly Arg Ser Phe Phe Cys Ser Ala Thr Leu Glu Val Asp Gly Glu
 370 375 380

Phe Leu His Arg Asn Ser Ser Val Gln Leu Arg Val Leu Tyr Gly Pro
 385 390 395 400

Lys Ile Asp Arg Ala Thr Cys Pro Gln His Leu Lys Trp Lys Asp Lys
 405 410 415

Thr Arg His Val Leu Gln Cys Gln Ala Arg Gly Asn Pro Tyr Pro Glu
 420 425 430

Leu Arg Cys Leu Lys Glu Gly Ser Ser Arg Glu Val Pro Val Gly Ile
 435 440 445

Pro Phe Phe Val Asn Val Thr His Asn Gly Thr Tyr Gln Cys Gln Ala
 450 455 460

Ser Ser Ser Arg Gly Lys Tyr Thr Leu Val Val Val Met Asp Ile Glu
 465 470 475 480

Ala Gly Ser Ser His Phe Val Pro Val Phe Val Ala Val Leu Leu Thr
 485 490 495

Leu Gly Val Val Thr Ile Val Leu Ala Leu Met Tyr Val Phe Arg Glu
 500 505 510

His Gln Arg Ser Gly Ser Tyr His Val Arg Glu Glu Ser Thr Tyr Leu
 515 520 525

Pro Leu Thr Ser Met Gln Pro Thr Glu Ala Met Gly Glu Glu Pro Ser
 530 535 540

Arg Ala Glu
 545

<210> 2970

<211> 260

<212> PRT

<213> Homo sapiens

<400> 2970

Met Arg Pro Glu Asp Arg Met Phe His Ile Arg Ala Val Ile Leu Arg
 1 5 10 15

Ala Leu Ser Leu Ala Phe Leu Leu Ser Leu Arg Gly Ala Gly Ala Ile
 20 25 30

Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe Val Gln Thr His Arg
 35 40 45

Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu Asp Glu Met Phe Tyr
 50 55 60

Val Asp Leu Asp Lys Lys Glu Thr Val Trp His Leu Glu Glu Phe Gly
 65 70 75 80

Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu Ala Asn Ile Ala Ile
 85 90 95

Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg Ser Asn His Thr Gln
 100 105 110

Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe Pro Lys Glu Pro Val
 115 120 125

Glu Leu Gly Gln Pro Asn Thr Leu Ile Cys His Ile Asp Lys Phe Phe
 130 135 140

Pro Pro Val Leu Asn Val Thr Trp Leu Cys Asn Gly Glu Leu Val Thr
 145 150 155 160

Glu Gly Val Ala Glu Ser Leu Phe Leu Pro Arg Thr Asp Tyr Ser Phe
 165 170 175

His Lys Phe His Tyr Leu Thr Phe Val Pro Ser Ala Glu Asp Phe Tyr
 180 185 190

Asp Cys Arg Val Glu His Trp Gly Leu Asp Gln Pro Leu Leu Lys His
 195 200 205

Trp Glu Ala Gln Glu Pro Ile Gln Met Pro Glu Thr Thr Glu Thr Val
 210 215 220

Leu Cys Ala Leu Gly Leu Val Leu Gly Leu Val Gly Ile Ile Val Gly

225 230 235 240

Thr Val Leu Ile Ile Lys Ser Leu Arg Ser Gly His Asp Pro Arg Ala
 245 250 255

Gln Gly Thr Leu
 260

<210> 2971
 <211> 495
 <212> PRT
 <213> Homo sapiens

<400> 2971

Met Pro Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly
 1 5 10 15

Met Leu Val Ala Ser Cys Leu Gly Arg Leu Ser Trp Tyr Asp Pro Asp
 20 25 30

Phe Gln Ala Arg Leu Thr Arg Ser Asn Ser Lys Cys Gln Gly Gln Leu
 35 40 45

Glu Val Tyr Leu Lys Asp Gly Trp His Met Val Cys Ser Gln Ser Trp
 50 55 60

Gly Arg Ser Ser Lys Gln Trp Glu Asp Pro Ser Gln Ala Ser Lys Val
 65 70 75 80

Cys Gln Arg Leu Asn Cys Gly Val Pro Leu Ser Leu Gly Pro Phe Leu
 85 90 95

Val Thr Tyr Thr Pro Gln Ser Ser Ile Ile Cys Tyr Gly Gln Leu Gly
 100 105 110

Ser Phe Ser Asn Cys Ser His Ser Arg Asn Asp Met Cys His Ser Leu
 115 120 125

Gly Leu Thr Cys Leu Glu Pro Gln Lys Thr Thr Pro Pro Thr Thr Arg
 130 135 140

Pro Pro Pro Thr Thr Thr Pro Glu Pro Thr Ala Pro Pro Arg Leu Gln
 145 150 155 160

Leu Val Ala Gln Ser Gly Gly Gln His Cys Ala Gly Val Val Glu Phe
 165 170 175

Tyr Ser Gly Ser Leu Gly Gly Thr Ile Ser Tyr Glu Ala Gln Asp Lys
 180 185 190

Thr Gln Asp Leu Glu Asn Phe Leu Cys Asn Asn Leu Gln Cys Gly Ser
 195 200 205

Phe Leu Lys His Leu Pro Glu Thr Glu Ala Gly Arg Ala Gln Asp Pro
 210 215 220

Gly Glu Pro Arg Glu His Gln Pro Leu Pro Ile Gln Trp Lys Ile Gln
 225 230 235 240

Asn Ser Ser Cys Thr Ser Leu Glu His Cys Phe Arg Lys Ile Lys Pro
 245 250 255

Gln Lys Ser Gly Arg Val Leu Ala Leu Leu Cys Ser Gly Phe Gln Pro
 260 265 270

Lys Val Gln Ser Arg Leu Val Gly Gly Ser Ser Ile Cys Glu Gly Thr
 275 280 285

Val Glu Val Arg Gln Gly Ala Gln Trp Ala Ala Leu Cys Asp Ser Ser
 290 295 300

Ser Ala Arg Ser Ser Leu Arg Trp Glu Glu Val Cys Arg Glu Gln Gln
 305 310 315 320

Cys Gly Ser Val Asn Ser Tyr Arg Val Leu Asp Ala Gly Asp Pro Thr
 325 330 335

Ser Arg Gly Leu Phe Cys Pro His Gln Lys Leu Ser Gln Cys His Glu
 340 345 350

Leu Trp Glu Arg Asn Ser Tyr Cys Lys Lys Val Phe Val Thr Cys Gln
 355 360 365

Asp Pro Asn Pro Ala Gly Leu Ala Ala Gly Thr Val Ala Ser Ile Ile
 370 375 380

Leu Ala Leu Val Leu Leu Val Val Leu Leu Val Val Cys Gly Pro Leu
 385 390 395 400

Ala Tyr Lys Lys Leu Val Lys Lys Phe Arg Gln Lys Lys Gln Arg Gln
 405 410 415

Trp Ile Gly Pro Thr Gly Met Asn Gln Asn Met Ser Phe His Arg Asn
420 425 430

His Thr Ala Thr Val Arg Ser His Ala Glu Asn Pro Thr Ala Ser His
435 440 445

Val Asp Asn Glu Tyr Ser Gln Pro Pro Arg Asn Ser Arg Leu Ser Ala
450 455 460

Tyr Pro Ala Leu Glu Gly Val Leu His Arg Ser Ser Met Gln Pro Asp
465 470 475 480

Asn Ser Ser Asp Ser Asp Tyr Asp Leu His Gly Ala Gln Arg Leu
485 490 495

<210> 2972

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2972

Lys Val Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Arg Leu Gly
1 5 10 15

Met Asp Gly Tyr Arg Gly Ile Ser Leu Ala Asn Trp Met Cys Leu Ala
20 25 30

Lys Trp Glu Ser Gly Tyr Asn Thr Arg Ala Thr Asn Tyr Asn Ala Gly
35 40 45

Asp Arg Ser Thr Asp Tyr Gly Ile Phe Gln Ile Asn Ser Arg Tyr Trp
50 55 60

Cys Asn Asp Gly Lys Thr Pro Gly Ala Val Asn Ala Cys His Leu Ser
65 70 75 80

Cys Ser Ala Leu Leu Gln Asp Asn Ile Ala Asp Ala Val Ala Cys Ala
85 90 95

Lys Arg Val Val Arg Asp Pro Gln Gly Ile Arg Ala Trp Val Ala Trp
100 105 110

Arg Asn Arg Cys Gln Asn Arg Asp Val Arg Gln Tyr Val Gln Gly Cys
115 120 125

Gly Val
130

<210> 2973
 <211> 491
 <212> PRT
 <213> Homo sapiens

<400> 2973

Met Asn Pro Ala Ala Glu Ala Glu Phe Asn Ile Leu Leu Ala Thr Asp
 1 5 10 15

Ser Tyr Lys Val Thr His Tyr Lys Gln Tyr Pro Pro Asn Thr Ser Lys
 20 25 30

Val Tyr Ser Tyr Phe Glu Cys Arg Glu Lys Lys Thr Glu Asn Ser Lys
 35 40 45

Leu Arg Lys Val Lys Tyr Glu Glu Thr Val Phe Tyr Gly Leu Gln Tyr
 50 55 60

Ile Leu Asn Lys Tyr Leu Lys Gly Lys Val Val Thr Lys Glu Lys Ile
 65 70 75 80

Gln Glu Ala Lys Asp Val Tyr Lys Glu His Phe Gln Asp Asp Val Phe
 85 90 95

Asn Glu Lys Gly Trp Asn Tyr Ile Leu Glu Lys Tyr Asp Gly His Leu
 100 105 110

Pro Ile Glu Ile Lys Ala Val Pro Glu Gly Phe Val Ile Pro Arg Gly
 115 120 125

Asn Val Leu Phe Thr Val Glu Asn Thr Asp Pro Glu Cys Tyr Trp Leu
 130 135 140

Thr Asn Trp Ile Glu Thr Ile Leu Val Gln Ser Trp Tyr Pro Ile Thr
 145 150 155 160

Val Ala Thr Asn Ser Arg Glu Gln Lys Lys Ile Leu Ala Lys Tyr Leu
 165 170 175

Leu Glu Thr Ser Gly Asn Leu Asp Gly Leu Glu Tyr Lys Leu His Asp
 180 185 190

Phe Gly Tyr Arg Gly Val Ser Ser Gln Glu Thr Ala Gly Ile Gly Ala
 195 200 205

Ser Ala His Leu Val Asn Phe Lys Gly Thr Asp Thr Val Ala Gly Leu
210 215 220

Ala Leu Ile Lys Lys Tyr Tyr Gly Thr Lys Asp Pro Val Pro Gly Tyr
225 230 235 240

Ser Val Pro Ala Ala Glu His Ser Thr Ile Thr Ala Trp Gly Lys Asp
245 250 255

His Glu Lys Asp Ala Phe Glu His Ile Val Thr Gln Phe Ser Ser Val
260 265 270

Pro Val Ser Val Val Ser Asp Ser Tyr Asp Ile Tyr Asn Ala Cys Glu
275 280 285

Lys Ile Trp Gly Glu Asp Leu Arg His Leu Ile Val Ser Arg Ser Thr
290 295 300

Gln Ala Pro Leu Ile Ile Arg Pro Asp Ser Gly Asn Pro Leu Asp Thr
305 310 315 320

Val Leu Lys Val Leu Glu Ile Leu Gly Lys Lys Phe Pro Val Thr Glu
325 330 335

Asn Ser Lys Gly Tyr Lys Leu Leu Pro Pro Tyr Leu Arg Val Ile Gln
340 345 350

Gly Asp Gly Val Asp Ile Asn Thr Leu Gln Glu Ile Val Glu Gly Met
355 360 365

Lys Gln Lys Met Trp Ser Ile Glu Asn Ile Ala Phe Gly Ser Gly Gly
370 375 380

Gly Leu Leu Gln Lys Leu Thr Arg Asp Leu Leu Asn Cys Ser Phe Lys
385 390 395 400

Cys Ser Tyr Val Val Thr Asn Gly Leu Gly Ile Asn Val Phe Lys Asp
405 410 415

Pro Val Ala Asp Pro Asn Lys Arg Ser Lys Lys Gly Arg Leu Ser Leu
420 425 430

His Arg Thr Pro Ala Gly Asn Phe Val Thr Leu Glu Glu Gly Lys Gly
435 440 445

Asp Leu Glu Glu Tyr Gly Gln Asp Leu Leu His Thr Val Phe Lys Asn

450

455

460

Gly Lys Val Thr Lys Ser Tyr Ser Phe Asp Glu Ile Arg Lys Asn Ala
 465 470 475 480

Gln Leu Asn Ile Glu Leu Glu Ala Ala His His
 485 490

<210> 2974

<211> 862

<212> PRT

<213> Homo sapiens

<400> 2974

Met Glu Arg Ala Glu Ser Ser Ser Thr Glu Pro Ala Lys Ala Ile Lys
 1 5 10 15

Pro Ile Asp Arg Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Val
 20 25 30

Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Val Glu Asn Ser Leu Asp
 35 40 45

Ala Gly Ala Thr Asn Ile Asp Leu Lys Leu Lys Asp Tyr Gly Val Asp
 50 55 60

Leu Ile Glu Val Ser Asp Asn Gly Cys Gly Val Glu Glu Glu Asn Phe
 65 70 75 80

Glu Gly Leu Thr Leu Lys His His Thr Ser Lys Ile Gln Glu Phe Ala
 85 90 95

Asp Leu Thr Gln Val Glu Thr Phe Gly Phe Arg Gly Glu Ala Leu Ser
 100 105 110

Ser Leu Cys Ala Leu Ser Asp Val Thr Ile Ser Thr Cys His Ala Ser
 115 120 125

Ala Lys Val Gly Thr Arg Leu Met Phe Asp His Asn Gly Lys Ile Ile
 130 135 140

Gln Lys Thr Pro Tyr Pro Arg Pro Arg Gly Thr Thr Val Ser Val Gln
 145 150 155 160

Gln Leu Phe Ser Thr Leu Pro Val Arg His Lys Glu Phe Gln Arg Asn
 165 170 175

Ile Lys Lys Glu Tyr Ala Lys Met Val Gln Val Leu His Ala Tyr Cys
 180 185 190

Ile Ile Ser Ala Gly Ile Arg Val Ser Cys Thr Asn Gln Leu Gly Gln
 195 200 205

Gly Lys Arg Gln Pro Val Val Cys Thr Gly Gly Ser Pro Ser Ile Lys
 210 215 220

Glu Asn Ile Gly Ser Val Phe Gly Gln Lys Gln Leu Gln Ser Leu Ile
 225 230 235 240

Pro Phe Val Gln Leu Pro Pro Ser Asp Ser Val Cys Glu Glu Tyr Gly
 245 250 255

Leu Ser Cys Ser Asp Ala Leu His Asn Leu Phe Tyr Ile Ser Gly Phe
 260 265 270

Ile Ser Gln Cys Thr His Gly Val Gly Arg Ser Ser Thr Asp Arg Gln
 275 280 285

Phe Phe Phe Ile Asn Arg Arg Pro Cys Asp Pro Ala Lys Val Cys Arg
 290 295 300

Leu Val Asn Glu Val Tyr His Met Tyr Asn Arg His Gln Tyr Pro Phe
 305 310 315 320

Val Val Leu Asn Ile Ser Val Asp Ser Glu Cys Val Asp Ile Asn Val
 325 330 335

Thr Pro Asp Lys Arg Gln Ile Leu Leu Gln Glu Glu Lys Leu Leu Leu
 340 345 350

Ala Val Leu Lys Thr Ser Leu Ile Gly Met Phe Asp Ser Asp Val Asn
 355 360 365

Lys Leu Asn Val Ser Gln Gln Pro Leu Leu Asp Val Glu Gly Asn Leu
 370 375 380

Ile Lys Met His Ala Ala Asp Leu Glu Lys Pro Met Val Glu Lys Gln
 385 390 395 400

Asp Gln Ser Pro Ser Leu Arg Thr Gly Glu Glu Lys Lys Asp Val Ser
 405 410 415

Ile Ser Arg Leu Arg Glu Ala Phe Ser Leu Arg His Thr Thr Glu Asn
420 425 430

Lys Pro His Ser Pro Lys Thr Pro Glu Pro Arg Arg Ser Pro Leu Gly
435 440 445

Gln Lys Arg Gly Met Leu Ser Ser Thr Ser Gly Ala Ile Ser Asp
450 455 460

Lys Gly Val Leu Arg Pro Gln Lys Glu Ala Val Ser Ser Ser His Gly
465 470 475 480

Pro Ser Asp Pro Thr Asp Arg Ala Glu Val Glu Lys Asp Ser Gly His
485 490 495

Gly Ser Thr Ser Val Asp Ser Glu Gly Phe Ser Ile Pro Asp Thr Gly
500 505 510

Ser His Cys Ser Ser Glu Tyr Ala Ala Ser Ser Pro Gly Asp Arg Gly
515 520 525

Ser Gln Glu His Val Asp Ser Gln Glu Lys Ala Pro Glu Thr Asp Asp
530 535 540

Ser Phe Ser Asp Val Asp Cys His Ser Asn Gln Glu Asp Thr Gly Cys
545 550 555 560

Lys Phe Arg Val Leu Pro Gln Pro Thr Asn Leu Ala Thr Pro Asn Thr
565 570 575

Lys Arg Phe Lys Lys Glu Glu Ile Leu Ser Ser Ser Asp Ile Cys Gln
580 585 590

Lys Leu Val Asn Thr Gln Asp Met Ser Ala Ser Gln Val Asp Val Ala
595 600 605

Val Lys Ile Asn Lys Lys Val Val Pro Leu Asp Phe Ser Met Ser Ser
610 615 620

Leu Ala Lys Arg Ile Lys Gln Leu His His Glu Ala Gln Gln Ser Glu
625 630 635 640

Gly Glu Gln Asn Tyr Arg Lys Phe Arg Ala Lys Ile Cys Pro Gly Glu
645 650 655

Asn Gln Ala Ala Glu Asp Glu Leu Arg Lys Glu Ile Ser Lys Thr Met

660

665

670

Phe Ala Glu Met Glu Ile Ile Gly Gln Phe Asn Leu Gly Phe Ile Ile
 675 680 685

Thr Lys Leu Asn Glu Asp Ile Phe Ile Val Asp Gln His Ala Thr Asp
 690 695 700

Glu Lys Tyr Asn Phe Glu Met Leu Gln Gln His Thr Val Leu Gln Gly
 705 710 715 720

Gln Arg Leu Ile Ala Pro Gln Thr Leu Asn Leu Thr Ala Val Asn Glu
 725 730 735

Ala Val Leu Ile Glu Asn Leu Glu Ile Phe Arg Lys Asn Gly Phe Asp
 740 745 750

Phe Val Ile Asp Glu Asn Ala Pro Val Thr Glu Arg Ala Lys Leu Ile
 755 760 765

Ser Leu Pro Thr Ser Lys Asn Trp Thr Phe Gly Pro Gln Asp Val Asp
 770 775 780

Glu Leu Ile Phe Met Leu Ser Asp Ser Pro Gly Val Met Cys Arg Pro
 785 790 795 800

Ser Arg Val Lys Gln Met Phe Ala Ser Arg Ala Cys Arg Lys Ser Val
 805 810 815

Met Ile Gly Thr Ala Leu Asn Thr Ser Glu Met Lys Lys Leu Ile Thr
 820 825 830

His Met Gly Glu Met Asp His Pro Trp Asn Cys Pro His Gly Arg Pro
 835 840 845

Thr Met Arg His Ile Ala Asn Leu Gly Val Ile Ser Gln Asn
 850 855 860

<210> 2975

<211> 1256

<212> PRT

<213> Homo sapiens

<400> 2975

Met Tyr Leu Trp Leu Lys Leu Leu Ala Phe Gly Phe Ala Phe Leu Asp
 1 5 10 15

Thr Glu Val Phe Val Thr Gly Gln Ser Pro Thr Pro Ser Pro Thr Gly
 20 25 30

Leu Thr Thr Ala Lys Met Pro Ser Val Pro Leu Ser Ser Asp Pro Leu
 35 40 45

Pro Thr His Thr Thr Ala Phe Ser Pro Ala Ser Thr Phe Glu Arg Glu
 50 55 60

Asn Asp Phe Ser Glu Thr Thr Thr Ser Leu Ser Pro Asp Asn Thr Ser
 65 70 75 80

Thr Gln Val Ser Pro Asp Ser Leu Asp Asn Ala Ser Ala Phe Asn Thr
 85 90 95

Thr Gly Val Ser Ser Val Gln Thr Pro His Leu Pro Thr His Ala Asp
 100 105 110

Ser Gln Thr Pro Ser Ala Gly Thr Asp Thr Gln Thr Phe Ser Gly Ser
 115 120 125

Ala Ala Asn Ala Lys Leu Asn Pro Thr Pro Gly Ser Asn Ala Ile Ser
 130 135 140

Asp Ala Tyr Leu Asn Ala Ser Glu Thr Thr Thr Leu Ser Pro Ser Gly
 145 150 155 160

Ser Ala Val Ile Ser Thr Thr Thr Ile Ala Thr Thr Pro Ser Lys Pro
 165 170 175

Thr Cys Asp Glu Lys Tyr Ala Asn Ile Thr Val Asp Tyr Leu Tyr Asn
 180 185 190

Lys Glu Thr Lys Leu Phe Thr Ala Lys Leu Asn Val Asn Glu Asn Val
 195 200 205

Glu Cys Gly Asn Asn Thr Cys Thr Asn Asn Glu Val His Asn Leu Thr
 210 215 220

Glu Cys Lys Asn Ala Ser Val Ser Ile Ser His Asn Ser Cys Thr Ala
 225 230 235 240

Pro Asp Lys Thr Leu Ile Leu Asp Val Pro Pro Gly Val Glu Lys Phe
 245 250 255

Gln Leu His Asp Cys Thr Gln Val Glu Lys Ala Asp Thr Thr Ile Cys
 260 265 270

Leu Lys Trp Lys Asn Ile Glu Thr Phe Thr Cys Asp Thr Gln Asn Ile
 275 280 285

Thr Tyr Arg Phe Gln Cys Gly Asn Met Ile Phe Asp Asn Lys Glu Ile
 290 295 300

Lys Leu Glu Asn Leu Glu Pro Glu His Glu Tyr Lys Cys Asp Ser Glu
 305 310 315 320

Ile Leu Tyr Asn Asn His Lys Phe Thr Asn Ala Ser Lys Ile Ile Lys
 325 330 335

Thr Asp Phe Gly Ser Pro Gly Glu Pro Gln Ile Ile Phe Cys Arg Ser
 340 345 350

Glu Ala Ala His Gln Gly Val Ile Thr Trp Asn Pro Pro Gln Arg Ser
 355 360 365

Phe His Asn Phe Thr Leu Cys Tyr Ile Lys Glu Thr Glu Lys Asp Cys
 370 375 380

Leu Asn Leu Asp Lys Asn Leu Ile Lys Tyr Asp Leu Gln Asn Leu Lys
 385 390 395 400

Pro Tyr Thr Lys Tyr Val Leu Ser Leu His Ala Tyr Ile Ile Ala Lys
 405 410 415

Val Gln Arg Asn Gly Ser Ala Ala Met Cys His Phe Thr Thr Lys Ser
 420 425 430

Ala Pro Pro Ser Gln Val Trp Asn Met Thr Val Ser Met Thr Ser Asp
 435 440 445

Asn Ser Met His Val Lys Cys Arg Pro Pro Arg Asp Arg Asn Gly Pro
 450 455 460

His Glu Arg Tyr His Leu Glu Val Glu Ala Gly Asn Thr Leu Val Arg
 465 470 475 480

Asn Glu Ser His Lys Asn Cys Asp Phe Arg Val Lys Asp Leu Gln Tyr
 485 490 495

Ser Thr Asp Tyr Thr Phe Lys Ala Tyr Phe His Asn Gly Asp Tyr Pro

500										505					510					
Gly	Glu	Pro	Phe	Ile	Leu	His	His	Ser	Thr	Ser	Tyr	Asn	Ser	Lys	Ala					
		515				520						525								
Leu	Ile	Ala	Phe	Leu	Ala	Phe	Leu	Ile	Ile	Val	Thr	Ser	Ile	Ala	Leu					
		530				535						540								
Leu	Val	Val	Leu	Tyr	Lys	Ile	Tyr	Asp	Leu	His	Lys	Lys	Arg	Ser	Cys					
		545			550					555					560					
Asn	Leu	Asp	Glu	Gln	Gln	Glu	Leu	Val	Glu	Arg	Asp	Asp	Glu	Lys	Gln					
				565					570					575						
Leu	Met	Asn	Val	Glu	Pro	Ile	His	Ala	Asp	Ile	Leu	Leu	Glu	Thr	Tyr					
				580					585					590						
Lys	Arg	Lys	Ile	Ala	Asp	Glu	Gly	Arg	Leu	Phe	Leu	Ala	Glu	Phe	Gln					
				595			600					605								
Ser	Ile	Pro	Arg	Val	Phe	Ser	Lys	Phe	Pro	Ile	Lys	Glu	Ala	Arg	Lys					
				610			615					620								
Pro	Phe	Asn	Gln	Asn	Lys	Asn	Arg	Tyr	Val	Asp	Ile	Leu	Pro	Tyr	Asp					
						630					635									
Tyr	Asn	Arg	Val	Glu	Leu	Ser	Glu	Ile	Asn	Gly	Asp	Ala	Gly	Ser	Asn					
				645					650					655						
Tyr	Ile	Asn	Ala	Ser	Tyr	Ile	Asp	Gly	Phe	Lys	Glu	Pro	Arg	Lys	Tyr					
				660					665					670						
Ile	Ala	Ala	Gln	Gly	Pro	Arg	Asp	Glu	Thr	Val	Asp	Asp	Phe	Trp	Arg					
				675			680					685								
Met	Ile	Trp	Glu	Gln	Lys	Ala	Thr	Val	Ile	Val	Met	Val	Thr	Arg	Cys					
				690			695					700								
Glu	Glu	Gly	Asn	Arg	Asn	Lys	Cys	Ala	Glu	Tyr	Trp	Pro	Ser	Met	Glu					
						710					715									
Glu	Gly	Thr	Arg	Ala	Phe	Gly	Asp	Val	Val	Val	Lys	Ile	Asn	Gln	His					
				725					730					735						
Lys	Arg	Cys	Pro	Asp	Tyr	Ile	Ile	Gln	Lys	Leu	Asn	Ile	Val	Asn	Lys					
				740			745							750						

Lys Glu Lys Ala Thr Gly Arg Glu Val Thr His Ile Gln Phe Thr Ser
 755 760 765
 Trp Pro Asp His Gly Val Pro Glu Asp Pro His Leu Leu Lys Leu
 770 775 780
 Arg Arg Arg Val Asn Ala Phe Ser Asn Phe Phe Ser Gly Pro Ile Val
 785 790 795 800
 Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Thr Tyr Ile Gly Ile
 805 810 815
 Asp Ala Met Leu Glu Gly Leu Glu Ala Glu Asn Lys Val Asp Val Tyr
 820 825 830
 Gly Tyr Val Val Lys Leu Arg Arg Gln Arg Cys Leu Met Val Gln Val
 835 840 845
 Glu Ala Gln Tyr Ile Leu Ile His Gln Ala Leu Val Glu Tyr Asn Gln
 850 855 860
 Phe Gly Glu Thr Glu Val Asn Leu Ser Glu Leu His Pro Tyr Leu His
 865 870 875 880
 Asn Met Lys Lys Arg Asp Pro Pro Ser Glu Pro Ser Pro Leu Glu Ala
 885 890 895
 Glu Phe Gln Arg Leu Pro Ser Tyr Arg Ser Trp Arg Thr Gln His Ile
 900 905 910
 Gly Asn Gln Glu Glu Asn Lys Ser Lys Asn Arg Asn Ser Asn Val Ile
 915 920 925
 Pro Tyr Asp Tyr Asn Arg Val Pro Leu Lys His Glu Leu Glu Met Ser
 930 935 940
 Lys Glu Ser Glu His Asp Ser Asp Glu Ser Ser Asp Asp Asp Ser Asp
 945 950 955 960
 Ser Glu Glu Pro Ser Lys Tyr Ile Asn Ala Ser Phe Ile Met Ser Tyr
 965 970 975
 Trp Lys Pro Glu Val Met Ile Ala Ala Gln Gly Pro Leu Lys Glu Thr
 980 985 990

Ile Gly Asp Phe Trp Gln Met Ile Phe Gln Arg Lys Val Lys Val Ile
 995 1000 1005

Val Met Leu Thr Glu Leu Lys His Gly Asp Gln Glu Ile Cys Ala
 1010 1015 1020

Gln Tyr Trp Gly Glu Gly Lys Gln Thr Tyr Gly Asp Ile Glu Val
 1025 1030 1035

Asp Leu Lys Asp Thr Asp Lys Ser Ser Thr Tyr Thr Leu Arg Val
 1040 1045 1050

Phe Glu Leu Arg His Ser Lys Arg Lys Asp Ser Arg Thr Val Tyr
 1055 1060 1065

Gln Tyr Gln Tyr Thr Asn Trp Ser Val Glu Gln Leu Pro Ala Glu
 1070 1075 1080

Pro Lys Glu Leu Ile Ser Met Ile Gln Val Val Lys Gln Lys Leu
 1085 1090 1095

Pro Gln Lys Asn Ser Ser Glu Gly Asn Lys His His Lys Ser Thr
 1100 1105 1110

Pro Leu Leu Ile His Cys Arg Asp Gly Ser Gln Gln Thr Gly Ile
 1115 1120 1125

Phe Cys Ala Leu Leu Asn Leu Leu Glu Ser Ala Glu Thr Glu Glu
 1130 1135 1140

Val Val Asp Ile Phe Gln Val Val Lys Ala Leu Arg Lys Ala Arg
 1145 1150 1155

Pro Gly Met Val Ser Thr Phe Glu Gln Tyr Gln Phe Leu Tyr Asp
 1160 1165 1170

Val Ile Ala Ser Thr Tyr Pro Ala Gln Asn Gly Gln Val Lys Lys
 1175 1180 1185

Asn Asn His Gln Glu Asp Lys Ile Glu Phe Asp Asn Glu Val Asp
 1190 1195 1200

Lys Val Lys Gln Asp Ala Asn Cys Val Asn Pro Leu Gly Ala Pro
 1205 1210 1215

Glu Lys Leu Pro Glu Ala Lys Glu Gln Ala Glu Gly Ser Glu Pro
1220 1225 1230

Thr Ser Gly Thr Glu Gly Pro Glu His Ser Val Asn Gly Pro Ala
1235 1240 1245

Ser Pro Ala Leu Asn Gln Gly Ser
1250 1255

<210> 2976

<211> 319

<212> PRT

<213> Homo sapiens

<400> 2976

Met Lys Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val
1 5 10 15

Ser Leu Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser
20 25 30

Val Leu Gly Pro Ser Gly Pro Ile Leu Ala Met Val Gly Glu Asp Ala
35 40 45

Asp Leu Pro Cys His Leu Phe Pro Thr Met Ser Ala Glu Thr Met Glu
50 55 60

Leu Lys Trp Val Ser Ser Ser Leu Arg Gln Val Val Asn Val Tyr Ala
65 70 75 80

Asp Gly Lys Glu Val Glu Asp Arg Gln Ser Ala Pro Tyr Arg Gly Arg
85 90 95

Thr Ser Ile Leu Arg Asp Gly Ile Thr Ala Gly Lys Ala Ala Leu Arg
100 105 110

Ile His Asn Val Thr Ala Ser Asp Ser Gly Lys Tyr Leu Cys Tyr Phe
115 120 125

Gln Asp Gly Asp Phe Tyr Glu Lys Ala Leu Val Glu Leu Lys Val Ala
130 135 140

Ala Leu Gly Ser Asn Leu His Val Glu Val Lys Gly Tyr Glu Asp Gly
145 150 155 160

Gly Ile His Leu Glu Cys Arg Ser Thr Gly Trp Tyr Pro Gln Pro Gln
165 170 175

Ile Gln Trp Ser Asn Ala Lys Gly Glu Asn Ile Pro Ala Val Glu Ala
 180 185 190

Pro Val Val Ala Asp Gly Val Gly Leu Tyr Glu Val Ala Ala Ser Val
 195 200 205

Ile Met Arg Gly Gly Ser Gly Glu Gly Val Ser Cys Ile Ile Arg Asn
 210 215 220

Ser Leu Leu Gly Leu Glu Lys Thr Ala Ser Ile Ser Ile Ala Asp Pro
 225 230 235 240

Phe Phe Arg Ser Ala Gln Pro Trp Ile Ala Ala Leu Ala Gly Thr Leu
 245 250 255

Pro Ile Leu Leu Leu Leu Ala Gly Ala Ser Tyr Phe Leu Trp Arg
 260 265 270

Gln Gln Lys Glu Ile Thr Ala Leu Ser Ser Glu Ile Glu Ser Glu Gln
 275 280 285

Glu Met Lys Glu Met Gly Tyr Ala Ala Thr Glu Arg Glu Ile Ser Leu
 290 295 300

Arg Glu Ser Leu Gln Glu Glu Leu Lys Arg Lys Lys Ser Ser Thr
 305 310 315

<210> 2977

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2977

Met Leu Leu Gln Ser Gln Thr Met Gly Val Ser His Ser Phe Thr Pro
 1 5 10 15

Lys Gly Ile Thr Ile Pro Gln Arg Glu Lys Pro Gly His Met Tyr Gln
 20 25 30

Asn Glu Asp Tyr Leu Gln Asn Gly Leu Pro Thr Glu Thr Thr Val Leu
 35 40 45

Gly Thr Val Gln Ile Leu Cys Cys Leu Leu Ile Ser Ser Leu Gly Ala
 50 55 60

Ile Leu Val Phe Ala Pro Tyr Pro Ser His Phe Asn Pro Ala Ile Ser
65 70 75 80

Thr Thr Leu Met Ser Gly Tyr Pro Phe Leu Gly Ala Leu Cys Phe Gly
85 90 95

Ile Thr Gly Ser Leu Ser Ile Ile Ser Gly Lys Gln Ser Thr Lys Pro
100 105 110

Phe Asp Leu Ser Ser Leu Thr Ser Asn Ala Val Ser Ser Val Thr Ala
115 120 125

Gly Ala Gly Leu Phe Leu Leu Ala Asp Ser Met Val Ala Leu Arg Thr
130 135 140

Ala Ser Gln His Cys Gly Ser Glu Met Asp Tyr Leu Ser Ser Leu Pro
145 150 155 160

Tyr Ser Glu Tyr Tyr Tyr Pro Ile Tyr Glu Ile Lys Asp Cys Leu Leu
165 170 175

Thr Ser Val Ser Leu Thr Gly Val Leu Val Val Met Leu Ile Phe Thr
180 185 190

Val Leu Glu Leu Leu Leu Ala Ala Tyr Ser Ser Val Phe Trp Trp Lys
195 200 205

Gln Leu Tyr Ser Asn Asn Pro Gly Ser Ser Phe Ser Ser Thr Gln Ser
210 215 220

Gln Asp His Ile Gln Gln Val Lys Lys Ser Ser Ser Arg Ser Trp Ile
225 230 235 240

<210> 2978

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2978

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Ser Leu Ala Ala Leu Thr
1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Arg Leu Ala Phe Ala Gly Asp Thr
20 25 30

Arg Pro Arg Phe Leu Glu Leu Arg Lys Ser Glu Cys His Phe Phe Asn
35 40 45

Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu
 50 55 60

Glu Phe Leu Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
 65 70 75 80

Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Leu
 85 90 95

Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr
 100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Gln Val
 115 120 125

Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu
 165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205

Val Thr Ser Ala Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser
 260 265

<210> 2979
 <211> 325
 <212> PRT

<213> Homo sapiens

<400> 2979

Met Pro Ile Thr Arg Met Arg Met Arg Pro Trp Leu Glu Met Gln Ile
 1 5 10 15

Asn Ser Asn Gln Ile Pro Gly Leu Ile Trp Ile Asn Lys Glu Glu Met
 20 25 30

Ile Phe Gln Ile Pro Trp Lys His Ala Ala Lys His Gly Trp Asp Ile
 35 40 45

Asn Lys Asp Ala Cys Leu Phe Arg Ser Trp Ala Ile His Thr Gly Arg
 50 55 60

Tyr Lys Ala Gly Glu Lys Glu Pro Asp Pro Lys Thr Trp Lys Ala Asn
 65 70 75 80

Phe Arg Cys Ala Met Asn Ser Leu Pro Asp Ile Glu Glu Val Lys Asp
 85 90 95

Gln Ser Arg Asn Lys Gly Ser Ser Ala Val Arg Val Tyr Arg Met Leu
 100 105 110

Pro Pro Leu Thr Lys Asn Gln Arg Lys Glu Arg Lys Ser Lys Ser Ser
 115 120 125

Arg Asp Ala Lys Ser Lys Ala Lys Arg Lys Ser Cys Gly Asp Ser Ser
 130 135 140

Pro Asp Thr Phe Ser Asp Gly Leu Ser Ser Ser Thr Leu Pro Asp Asp
 145 150 155 160

His Ser Ser Tyr Thr Val Pro Gly Tyr Met Gln Asp Leu Glu Val Glu
 165 170 175

Gln Ala Leu Thr Pro Ala Leu Ser Pro Cys Ala Val Ser Ser Thr Leu
 180 185 190

Pro Asp Trp His Ile Pro Val Glu Val Val Pro Asp Ser Thr Ser Asp
 195 200 205

Leu Tyr Asn Phe Gln Val Ser Pro Met Pro Ser Thr Ser Glu Ala Thr
 210 215 220

Thr Asp Glu Asp Glu Glu Gly Lys Leu Pro Glu Asp Ile Met Lys Leu

225 230 235 240

 Leu Glu Gln Ser Glu Trp Gln Pro Thr Asn Val Asp Gly Lys Gly Tyr
 245 250 255

 Leu Leu Asn Glu Pro Gly Val Gln Pro Thr Ser Val Tyr Gly Asp Phe
 260 265 270

 Ser Cys Lys Glu Glu Pro Glu Ile Asp Ser Pro Gly Gly Asp Ile Gly
 275 280 285

 Leu Ser Leu Gln Arg Val Phe Thr Asp Leu Lys Asn Met Asp Ala Thr
 290 295 300

 Trp Leu Asp Ser Leu Leu Thr Pro Val Arg Leu Pro Ser Ile Gln Ala
 305 310 315 320

 Ile Pro Cys Ala Pro
 325

 <210> 2980
 <211> 132
 <212> PRT
 <213> Homo sapiens

 <400> 2980

 Met Glu Phe Asp Leu Asn Gly Asn Gly Asp Ile Gly Glu Lys Arg Val
 1 5 10 15

 Ile Cys Gly Gly Arg Val Val Cys Arg Pro Lys Lys Thr Glu Val Ser
 20 25 30

 Pro Thr Cys Ser Ile Pro His Asp Leu Gly Gly Gly Pro Thr Thr
 35 40 45

 Val Gly Gly Arg Arg Met Gly Met Arg Lys Trp Glu Arg Arg Glu Arg
 50 55 60

 Val Ser Pro Pro Ser Pro His Pro His Pro Leu Pro Pro Asp Ile Met
 65 70 75 80

 Ser Leu Lys Arg Met Leu Glu Lys Leu Gly Val Pro Lys Thr His Leu
 85 90 95

 Glu Leu Lys Lys Leu Ile Gly Glu Val Ser Ser Gly Ser Gly Glu Thr
 100 105 110

Phe Ser Tyr Pro Asp Phe Leu Arg Met Met Leu Gly Lys Arg Ser Ala
 115 120 125

Ile Leu Lys Met
 130

<210> 2981
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 2981

Met Thr Asn Ser Ser Phe Phe Cys Pro Val Tyr Lys Asp Leu Glu Pro
 1 5 10 15

Phe Thr Tyr Phe Phe Tyr Leu Val Phe Leu Val Gly Ile Ile Gly Ser
 20 25 30

Cys Phe Ala Thr Trp Ala Phe Ile Gln Lys Asn Thr Asn His Arg Cys
 35 40 45

Val Ser Ile Tyr Leu Ile Asn Leu Leu Thr Ala Asp Phe Leu Leu Thr
 50 55 60

Leu Ala Leu Pro Val Lys Ile Val Val Asp Leu Gly Val Ala Pro Trp
 65 70 75 80

Lys Leu Lys Ile Phe His Cys Gln Val Thr Ala Cys Leu Ile Tyr Ile
 85 90 95

Asn Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg
 100 105 110

Cys Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro
 115 120 125

Gly Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu
 130 135 140

Ile Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys
 145 150 155 160

Ser Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp
 165 170 175

His Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser

180

185

190

Ala Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg
 195 200 205

Asn Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn
 210 215 220

Ile Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His
 225 230 235 240

Ile Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp
 245 250 255

Cys Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu
 260 265 270

Leu Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu
 275 280 285

Ser Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys
 290 295 300

Glu Thr Lys Ala Gln Lys Glu Lys Leu Arg Cys Glu Asn Asn Ala
 305 310 315

<210> 2982

<211> 334

<212> PRT

<213> Homo sapiens

<400> 2982

Met Leu Thr Lys Pro Leu Gln Gly Pro Pro Ala Pro Pro Gly Thr Pro
 1 5 10 15

Thr Pro Pro Pro Gly Gly Lys Asp Arg Glu Ala Phe Glu Ala Glu Tyr
 20 25 30

Arg Leu Gly Pro Leu Leu Gly Lys Gly Gly Phe Gly Thr Val Phe Ala
 35 40 45

Gly His Arg Leu Thr Asp Arg Leu Gln Val Ala Ile Lys Val Ile Pro
 50 55 60

Arg Asn Arg Val Leu Gly Trp Ser Pro Leu Ser Asp Ser Val Thr Cys
 65 70 75 80

Pro Leu Glu Val Ala Leu Leu Trp Lys Val Gly Ala Gly Gly Gly His
 85 90 95

Pro Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Thr Gln Glu Gly Phe
 100 105 110

Met Leu Val Leu Glu Arg Pro Leu Pro Ala Gln Asp Leu Phe Asp Tyr
 115 120 125

Ile Thr Glu Lys Gly Pro Leu Gly Glu Gly Pro Ser Arg Cys Phe Phe
 130 135 140

Gly Gln Val Val Ala Ala Ile Gln His Cys His Ser Arg Gly Val Val
 145 150 155 160

His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp Leu Arg Arg Gly
 165 170 175

Cys Ala Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu Leu His Asp Glu
 180 185 190

Pro Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp
 195 200 205

Ile Ser Arg His Gln Tyr His Ala Leu Pro Ala Thr Val Trp Ser Leu
 210 215 220

Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile Pro Phe Glu Arg
 225 230 235 240

Asp Gln Glu Ile Leu Glu Ala Glu Leu His Phe Pro Ala His Val Ser
 245 250 255

Pro Asp Cys Cys Ala Leu Ile Arg Arg Cys Leu Ala Pro Lys Pro Ser
 260 265 270

Ser Arg Pro Ser Leu Glu Glu Ile Leu Leu Asp Pro Trp Met Gln Thr
 275 280 285

Pro Ala Glu Asp Val Thr Pro Gln Pro Leu Gln Arg Arg Pro Cys Pro
 290 295 300

Phe Gly Leu Val Leu Ala Thr Leu Ser Leu Ala Trp Pro Gly Leu Ala
 305 310 315 320

Pro Asn Gly Gln Lys Ser His Pro Met Ala Met Ser Gln Gly
 325 330

<210> 2983

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2983

Met Met Gln Lys Leu Leu Lys Cys Ser Arg Leu Val Leu Ala Leu Ala
 1 5 10 15

Leu Ile Leu Val Leu Glu Ser Ser Val Gln Gly Tyr Pro Thr Gln Arg
 20 25 30

Ala Arg Tyr Gln Trp Val Arg Cys Asn Pro Asp Ser Asn Ser Ala Asn
 35 40 45

Cys Leu Glu Glu Lys Gly Pro Met Phe Glu Leu Leu Pro Gly Glu Ser
 50 55 60

Asn Lys Ile Pro Arg Leu Arg Thr Asp Leu Phe Pro Lys Thr Arg Ile
 65 70 75 80

Gln Asp Leu Asn Arg Ile Phe Pro Leu Ser Glu Asp Tyr Ser Gly Ser
 85 90 95

Gly Phe Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Phe
 100 105 110

Leu Thr Glu Met Glu Gln Asp Tyr Gln Leu Val Asp Glu Ser Asp Ala
 115 120 125

Phe His Asp Asn Leu Arg Ser Leu Asp Arg Asn Leu Pro Ser Asp Ser
 130 135 140

Gln Asp Leu Gly Gln His Gly Leu Glu Glu Asp Phe Met Leu
 145 150 155

<210> 2984

<211> 1019

<212> PRT

<213> Homo sapiens

<400> 2984

Ala Asp Pro Glu Ser Pro Ile Leu Asp Leu Asp Leu His Leu Pro Leu
 1 5 10 15

Leu Cys Phe Arg Pro Glu Lys Val Leu Gln Ile Leu Thr Cys Ile Leu
 20 25 30

Thr Glu Gln Arg Ile Val Phe Phe Ser Ser Asp Trp Ala Leu Leu Thr
 35 40 45

Leu Val Thr Glu Cys Phe Met Ala Tyr Leu Tyr Pro Leu Gln Trp Gln
 50 55 60

His Pro Phe Val Pro Ile Leu Ser Asp Gln Met Leu Asp Phe Val Met
 65 70 75 80

Ala Pro Thr Ser Phe Leu Met Gly Cys His Leu Asp His Phe Glu Glu
 85 90 95

Val Ser Lys Glu Ala Asp Gly Leu Val Leu Ile Asn Ile Asp His Gly
 100 105 110

Ser Ile Thr Tyr Ser Lys Ser Thr Asp Asp Asn Val Asp Ile Pro Asp
 115 120 125

Val Pro Leu Leu Ala Ala Gln Thr Phe Ile Gln Arg Val Gln Ser Leu
 130 135 140

Gln Leu His His Glu Leu His Ala Ala His Leu Leu Ser Ser Thr Asp
 145 150 155 160

Leu Lys Glu Gly Arg Ala His Arg Arg Ser Trp Gln Gln Lys Leu Asn
 165 170 175

Cys Gln Ile Gln Gln Thr Thr Leu Gln Leu Leu Val Ser Ile Phe Arg
 180 185 190

Asp Val Lys Asn His Leu Asn Tyr Glu His Arg Val Phe Asn Ser Glu
 195 200 205

Glu Phe Leu Lys Thr Arg Ala Pro Gly Asp His Gln Phe Tyr Lys Gln
 210 215 220

Val Leu Asp Thr Tyr Met Phe His Ser Phe Leu Lys Ala Arg Leu Asn
 225 230 235 240

Arg Arg Met Asp Ala Phe Ala Gln Met Asp Leu Asp Thr Gln Ser Glu
 245 250 255

Glu Asp Arg Ile Asn Gly Met Leu Leu Ser Pro Arg Arg Pro Thr Val
260 265 270

Glu Lys Arg Ala Ser Arg Lys Ser Ser His Leu His Val Thr His Arg
275 280 285

Arg Met Val Val Ser Met Pro Asn Leu Gln Asp Ile Ala Met Pro Glu
290 295 300

Leu Ala Pro Arg Asn Ser Ser Leu Arg Leu Thr Asp Thr Ala Gly Cys
305 310 315 320

Arg Gly Ser Ser Ala Val Leu Asn Val Thr Pro Lys Ser Pro Tyr Thr
325 330 335

Phe Lys Ile Pro Glu Ile His Phe Pro Leu Glu Ser Lys Cys Val Gln
340 345 350

Ala Tyr His Ala His Phe Val Ser Met Leu Ser Glu Ala Met Cys Phe
355 360 365

Leu Ala Pro Asp Asn Ser Leu Leu Leu Ala Arg Tyr Leu Tyr Leu Arg
370 375 380

Gly Leu Val Tyr Leu Met Gln Gly Gln Leu Leu Asn Ala Leu Leu Asp
385 390 395 400

Phe Gln Asn Leu Tyr Lys Thr Asp Ile Arg Ile Phe Pro Thr Asp Leu
405 410 415

Val Lys Arg Thr Val Glu Ser Met Ser Ala Pro Glu Trp Glu Gly Ala
420 425 430

Glu Gln Ala Pro Glu Leu Met Arg Leu Ile Ser Glu Ile Leu Asp Lys
435 440 445

Pro His Glu Ala Ser Lys Leu Asp Asp His Val Lys Lys Phe Lys Leu
450 455 460

Pro Lys Lys His Met Gln Leu Gly Asp Phe Met Lys Arg Val Gln Glu
465 470 475 480

Ser Gly Ile Val Lys Asp Ala Ser Ile Ile His Arg Leu Phe Glu Ala
485 490 495

Leu Thr Val Gly Gln Glu Lys Gln Ile Asp Pro Glu Thr Phe Lys Asp

500

505

510

Phe Tyr Asn Cys Trp Lys Glu Thr Glu Ala Glu Ala Gln Glu Val Ser
 515 520 525

Leu Pro Trp Leu Val Met Glu His Leu Asp Lys Asn Glu Cys Val Cys
 530 535 540

Lys Leu Ser Ser Ser Val Lys Thr Asn Leu Gly Val Gly Lys Ile Ala
 545 550 555 560

Met Thr Gln Lys Arg Leu Phe Leu Leu Thr Glu Gly Arg Pro Gly Tyr
 565 570 575

Leu Glu Ile Ser Thr Phe Arg Asn Ile Glu Glu Val Arg Arg Thr Thr
 580 585 590

Thr Thr Phe Leu Leu Arg Arg Ile Pro Thr Leu Lys Ile Arg Val Ala
 595 600 605

Ser Lys Lys Glu Val Phe Glu Ala Asn Leu Lys Thr Glu Cys Asp Leu
 610 615 620

Trp His Leu Met Val Lys Glu Met Trp Ala Gly Lys Lys Leu Ala Asp
 625 630 635 640

Asp His Lys Asp Pro His Tyr Val Gln Gln Ala Leu Thr Asn Val Leu
 645 650 655

Leu Met Asp Ala Val Val Gly Thr Leu Gln Ser Pro Gly Ala Ile Tyr
 660 665 670

Ala Ala Ser Lys Leu Ser Tyr Phe Asp Lys Met Ser Asn Glu Met Pro
 675 680 685

Met Thr Leu Pro Glu Thr Thr Leu Glu Thr Leu Lys His Lys Ile Asn
 690 695 700

Pro Ser Ala Gly Glu Ala Phe Pro Gln Ala Val Asp Val Leu Leu Tyr
 705 710 715 720

Thr Pro Gly His Leu Asp Pro Ala Glu Lys Val Glu Asp Ala His Pro
 725 730 735

Lys Leu Trp Cys Ala Leu Ser Glu Gly Lys Val Thr Val Phe Asn Ala
 740 745 750

Ser Ser Trp Thr Ile His Gln His Ser Phe Lys Val Gly Thr Ala Lys
 755 760 765

Val Asn Cys Met Val Met Ala Asp Gln Asn Gln Val Trp Val Gly Ser
 770 775 780

Glu Asp Ser Val Ile Tyr Ile Ile Asn Val His Ser Met Ser Cys Asn
 785 790 795 800

Lys Gln Leu Thr Ala His Cys Ser Ser Val Thr Asp Leu Ile Val Gln
 805 810 815

Asp Gly Gln Glu Ala Pro Ser Asn Val Tyr Ser Cys Ser Met Asp Gly
 820 825 830

Met Val Leu Val Trp Asn Val Ser Thr Leu Gln Val Thr Ser Arg Phe
 835 840 845

Gln Leu Pro Arg Gly Gly Leu Thr Ser Ile Arg Leu His Gly Gly Arg
 850 855 860

Leu Trp Cys Cys Thr Gly Asn Ser Ile Met Val Met Lys Met Asn Gly
 865 870 875 880

Ser Leu His Gln Glu Leu Lys Ile Glu Glu Asn Phe Lys Asp Thr Ser
 885 890 895

Thr Ser Phe Leu Ala Phe Gln Leu Leu Pro Glu Glu Glu Gln Leu Trp
 900 905 910

Ala Ala Cys Ala Gly Arg Ser Glu Val Tyr Ile Trp Ser Leu Lys Asp
 915 920 925

Leu Ala Gln Pro Pro Gln Arg Val Pro Leu Glu Asp Cys Ser Glu Ile
 930 935 940

Asn Cys Met Ile Arg Val Lys Lys Gln Val Trp Val Gly Ser Arg Gly
 945 950 955 960

Leu Gly Gln Gly Thr Pro Lys Gly Lys Ile Tyr Val Ile Asp Ala Glu
 965 970 975

Arg Lys Thr Val Glu Lys Glu Leu Val Ala His Met Asp Thr Val Arg
 980 985 990

Thr Leu Cys Ser Ala Glu Asp Arg Tyr Val Leu Ser Gly Ser Gly Arg
 995 1000 1005

Glu Glu Gly Lys Val Ala Ile Trp Lys Gly Glu
 1010 1015

<210> 2985
 <211> 783
 <212> PRT
 <213> Homo sapiens

<400> 2985

Met Ala Lys Tyr Asn Thr Gly Gly Asn Pro Thr Glu Asp Val Ser Val
 1 5 10 15

Asn Ser Arg Pro Phe Arg Val Thr Gly Pro Asn Ser Ser Ser Gly Ile
 20 25 30

Gln Ala Arg Lys Asn Leu Phe Asn Asn Gln Gly Asn Ala Ser Pro Pro
 35 40 45

Ala Gly Pro Ser Asn Val Pro Lys Phe Gly Ser Pro Lys Pro Pro Val
 50 55 60

Ala Val Lys Pro Ser Ser Glu Glu Lys Pro Asp Lys Glu Pro Lys Pro
 65 70 75 80

Pro Phe Leu Lys Pro Thr Gly Ala Gly Gln Arg Phe Gly Thr Pro Ala
 85 90 95

Ser Leu Thr Thr Arg Asp Pro Glu Ala Lys Val Gly Phe Leu Lys Pro
 100 105 110

Val Gly Pro Lys Pro Ile Asn Leu Pro Lys Glu Asp Ser Lys Pro Thr
 115 120 125

Phe Pro Trp Pro Pro Gly Asn Lys Pro Ser Leu His Ser Val Asn Gln
 130 135 140

Asp His Asp Leu Lys Pro Leu Gly Pro Lys Ser Gly Pro Thr Pro Pro
 145 150 155 160

Thr Ser Glu Asn Glu Gln Lys Gln Ala Phe Pro Lys Leu Thr Gly Val
 165 170 175

Lys Gly Lys Phe Met Ser Ala Ser Gln Asp Leu Glu Pro Lys Pro Leu

180 185 190
 Phe Pro Lys Pro Ala Phe Gly Gln Lys Pro Pro Leu Ser Thr Glu Asn
 195 200 205
 Ser His Glu Asp Glu Ser Pro Met Lys Asn Val Ser Ser Ser Lys Gly
 210 215 220
 Ser Pro Ala Pro Leu Gly Val Arg Ser Lys Ser Gly Pro Leu Lys Pro
 225 230 235 240
 Ala Arg Glu Asp Ser Glu Asn Lys Asp His Ala Gly Glu Ile Ser Ser
 245 250 255
 Leu Pro Phe Pro Gly Val Val Leu Lys Pro Ala Ala Ser Arg Gly Gly
 260 265 270
 Leu Gly Leu Ser Lys Asn Gly Glu Glu Lys Lys Glu Asp Arg Lys Ile
 275 280 285
 Asp Ala Ala Lys Asn Thr Phe Gln Ser Lys Ile Asn Gln Glu Glu Leu
 290 295 300
 Ala Ser Gly Thr Pro Pro Ala Arg Phe Pro Lys Ala Pro Ser Lys Leu
 305 310 315 320
 Thr Val Gly Gly Pro Trp Gly Gln Ser Gln Glu Lys Glu Lys Gly Asp
 325 330 335
 Lys Asn Ser Ala Thr Pro Lys Gln Lys Pro Leu Pro Pro Leu Phe Thr
 340 345 350
 Leu Gly Pro Pro Pro Pro Lys Pro Asn Arg Pro Pro Asn Val Asp Leu
 355 360 365
 Thr Lys Phe His Lys Thr Ser Ser Gly Asn Ser Thr Ser Lys Gly Gln
 370 375 380
 Thr Ser Tyr Ser Thr Thr Ser Leu Pro Pro Pro Pro Ser His Pro
 385 390 395 400
 Ala Ser Gln Pro Pro Leu Pro Ala Ser His Pro Ser Gln Pro Pro Val
 405 410 415
 Pro Ser Leu Pro Pro Arg Asn Ile Lys Pro Pro Phe Asp Leu Lys Ser
 420 425 430

Pro Val Asn Glu Asp Asn Gln Asp Gly Val Thr His Ser Asp Gly Ala
 435 440 445
 Gly Asn Leu Asp Glu Glu Gln Asp Ser Glu Gly Glu Thr Tyr Glu Asp
 450 455 460
 Ile Glu Ala Ser Lys Glu Arg Glu Lys Lys Arg Glu Lys Glu Glu Lys
 465 470 475 480
 Lys Arg Leu Glu Leu Glu Lys Lys Glu Gln Lys Glu Lys Glu Lys Lys
 485 490 495
 Glu Gln Glu Ile Lys Lys Lys Phe Lys Leu Thr Gly Pro Ile Gln Val
 500 505 510
 Ile His Leu Ala Lys Ala Cys Cys Asp Val Lys Gly Gly Lys Asn Glu
 515 520 525
 Leu Ser Phe Lys Gln Gly Glu Gln Ile Glu Ile Ile Arg Ile Thr Asp
 530 535 540
 Asn Pro Glu Gly Lys Trp Leu Gly Arg Thr Ala Arg Gly Ser Tyr Gly
 545 550 555 560
 Tyr Ile Lys Thr Thr Ala Val Glu Ile Asp Tyr Asp Ser Leu Lys Leu
 565 570 575
 Lys Lys Asp Ser Leu Gly Ala Pro Ser Arg Pro Ile Glu Asp Asp Gln
 580 585 590
 Glu Val Tyr Asp Asp Val Ala Glu Gln Asp Asp Ile Ser Ser His Ser
 595 600 605
 Gln Ser Gly Ser Gly Gly Ile Phe Pro Pro Pro Pro Asp Asp Asp Ile
 610 615 620
 Tyr Asp Gly Ile Glu Glu Glu Asp Ala Asp Asp Gly Phe Pro Ala Pro
 625 630 635 640
 Pro Lys Gln Leu Asp Met Gly Asp Glu Val Tyr Asp Asp Val Asp Thr
 645 650 655
 Ser Asp Phe Pro Val Ser Ser Ala Glu Met Ser Gln Gly Thr Asn Phe
 660 665 670

Gly Lys Ala Lys Thr Glu Glu Lys Asp Leu Lys Lys Leu Lys Lys Gln
675 680 685

Glu Lys Glu Glu Lys Asp Phe Arg Lys Lys Phe Lys Tyr Asp Gly Glu
690 695 700

Ile Arg Val Leu Tyr Ser Thr Lys Val Thr Thr Ser Ile Thr Ser Lys
705 710 715 720

Lys Trp Gly Thr Arg Asp Leu Gln Val Lys Pro Gly Glu Ser Leu Glu
725 730 735

Val Ile Gln Thr Thr Asp Asp Thr Lys Val Leu Cys Arg Asn Glu Glu
740 745 750

Gly Lys Tyr Gly Tyr Val Leu Arg Ser Tyr Leu Ala Asp Asn Asp Gly
755 760 765

Glu Ile Tyr Asp Asp Ile Ala Asp Gly Cys Ile Tyr Asp Asn Asp
770 775 780

<210> 2986

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2986

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Ser Leu Ala Ala Leu Thr
1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Arg Leu Ala Phe Ala Gly Asp Thr
20 25 30

Arg Pro Arg Phe Leu Glu Leu Arg Lys Ser Glu Cys His Phe Phe Asn
35 40 45

Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu
50 55 60

Glu Phe Leu Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr
65 70 75 80

Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Leu
85 90 95

Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr

100	105	110
Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Gln Val		
115	120	125
Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln His His Asn Leu Leu		
130	135	140
Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp		
145	150	155
Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu		
165	170	175
Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr		
180	185	190
Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser		
195	200	205
Val Thr Ser Ala Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala		
210	215	220
Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu		
225	230	235
Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His		
245	250	255
Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser		
260	265	
<210> 2987		
<211> 363		
<212> PRT		
<213> Homo sapiens		
<400> 2987		
Met Glu Val Lys Lys Lys Lys His Asp Lys Gln Glu Gln Lys Gly Ser		
1	5	10
Val Gly Ala Thr Phe Lys Leu Gly Asp Ser Leu Ser Asn Pro Asn Glu		
20	25	30
Arg Ala Ile Val Lys Glu Lys Met Val Ser Asn Thr Lys Ser Val Asp		
35	40	45

Thr Lys Ala Ser Ser Ser Lys Phe Ser Arg Ile Leu Thr Pro Lys Glu
 50 55 60

Tyr Leu Gln Arg Gln Lys His Lys Glu Ala Pro Ser Asn Lys Ala Ser
 65 70 75 80

Lys Lys Ile Cys Val Lys Asn Val Pro Cys Asp Ser Glu His Met Arg
 85 90 95

Pro Ser Lys Leu Ala Val Gln Val Glu Ser Cys Gly Lys Ser Asn Glu
 100 105 110

Lys His Ser Ser Gly Val Gln Thr Ser Lys Glu Ser Leu Asn Gly Leu
 115 120 125

Thr Ser His Gly Lys Asn Leu Lys Ile His His Ser Gln Glu Ser Lys
 130 135 140

Thr Tyr Asn Ile Leu Arg Asn Val Lys Glu Lys Val Gly Gly Lys Gln
 145 150 155 160

Pro Asp Lys Ile Trp Ile Asp Lys Thr Lys Leu Asp Lys Leu Thr Asn
 165 170 175

Ile Ser Asn Glu Ala Gln Phe Ser Gln Met Pro Pro Gln Val Lys Asp
 180 185 190

Gln Lys Lys Leu Tyr Leu Asn Arg Val Gly Phe Lys Cys Thr Glu Arg
 195 200 205

Glu Ser Ile Ser Leu Thr Lys Leu Glu Ser Ser Pro Arg Lys Leu His
 210 215 220

Lys Asp Lys Arg Gln Glu Asn Lys His Lys Thr Phe Leu Pro Val Lys
 225 230 235 240

Gly Asn Thr Glu Lys Ser Asn Met Leu Glu Phe Lys Leu Cys Pro Asp
 245 250 255

Ile Leu Leu Lys Asn Thr Asn Ser Val Glu Glu Arg Lys Asp Val Lys
 260 265 270

Pro His Pro Arg Lys Glu Gln Ala Pro Leu Gln Val Ser Gly Ile Lys
 275 280 285

Ser Thr Lys Glu Asp Trp Leu Lys Phe Val Ala Thr Lys Lys Arg Thr
 290 295 300

Gln Lys Asp Ser Gln Glu Arg Asp Asn Val Asn Ser Arg Leu Ser Lys
 305 310 315 320

Arg Ser Phe Ser Ala Asp Gly Phe Glu Met Leu Gln Asn Pro Val Lys
 325 330 335

Asp Ser Lys Glu Met Phe Gln Thr Tyr Lys Gln Met Tyr Leu Glu Lys
 340 345 350

Arg Ser Arg Ser Leu Gly Ser Ser Pro Val Lys
 355 360

<210> 2988

<211> 836

<212> PRT

<213> Homo sapiens

<400> 2988

Met Ala Arg Leu Gly Asn Cys Ser Leu Thr Trp Ala Ala Leu Ile Ile
 1 5 10 15

Leu Leu Leu Pro Gly Ser Leu Glu Glu Cys Gly His Ile Ser Val Ser
 20 25 30

Ala Pro Ile Val His Leu Gly Asp Pro Ile Thr Ala Ser Cys Ile Ile
 35 40 45

Lys Gln Asn Cys Ser His Leu Asp Pro Glu Pro Gln Ile Leu Trp Arg
 50 55 60

Leu Gly Ala Glu Leu Gln Pro Gly Gly Arg Gln Gln Arg Leu Ser Asp
 65 70 75 80

Gly Thr Gln Glu Ser Ile Ile Thr Leu Pro His Leu Asn His Thr Gln
 85 90 95

Ala Phe Leu Ser Cys Cys Leu Asn Trp Gly Asn Ser Leu Gln Ile Leu
 100 105 110

Asp Gln Val Glu Leu Arg Ala Gly Tyr Pro Pro Ala Ile Pro His Asn
 115 120 125

Leu Ser Cys Leu Met Asn Leu Thr Thr Ser Ser Leu Ile Cys Gln Trp
 130 135 140

Glu Pro Gly Pro Glu Thr His Leu Pro Thr Ser Phe Thr Leu Lys Ser
 145 150 155 160

Phe Lys Ser Arg Gly Asn Cys Gln Thr Gln Gly Asp Ser Ile Leu Asp
 165 170 175

Cys Val Pro Lys Asp Gly Gln Ser His Cys Cys Ile Pro Arg Lys His
 180 185 190

Leu Leu Leu Tyr Gln Asn Met Gly Ile Trp Val Gln Ala Glu Asn Ala
 195 200 205

Leu Gly Thr Ser Met Ser Pro Gln Leu Cys Leu Asp Pro Met Asp Val
 210 215 220

Val Lys Leu Glu Pro Pro Met Leu Arg Thr Met Asp Pro Ser Pro Glu
 225 230 235 240

Ala Ala Pro Pro Gln Ala Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp
 245 250 255

Gln Pro Gly Leu His Ile Asn Gln Lys Cys Glu Leu Arg His Lys Pro
 260 265 270

Gln Arg Gly Glu Ala Ser Trp Ala Leu Val Gly Pro Leu Pro Leu Glu
 275 280 285

Ala Leu Gln Tyr Glu Leu Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr
 290 295 300

Leu Gln Ile Arg Cys Ile Arg Trp Pro Leu Pro Gly His Trp Ser Asp
 305 310 315 320

Trp Ser Pro Ser Leu Glu Leu Arg Thr Thr Glu Arg Ala Pro Thr Val
 325 330 335

Arg Leu Asp Thr Trp Trp Arg Gln Arg Gln Leu Asp Pro Arg Thr Val
 340 345 350

Gln Leu Phe Trp Lys Pro Val Pro Leu Glu Glu Asp Ser Gly Arg Ile
 355 360 365

Gln Gly Tyr Val Val Ser Trp Arg Pro Ser Gly Gln Ala Gly Ala Ile
 370 375 380

Leu Pro Leu Cys Asn Thr Thr Glu Leu Ser Cys Thr Phe His Leu Pro
 385 390 395 400
 Ser Glu Ala Gln Glu Val Ala Leu Val Ala Tyr Asn Ser Ala Gly Thr
 405 410 415
 Ser Arg Pro Thr Pro Val Val Phe Ser Glu Ser Arg Gly Pro Ala Leu
 420 425 430
 Thr Arg Leu His Ala Met Ala Arg Asp Pro His Ser Leu Trp Val Gly
 435 440 445
 Trp Glu Pro Pro Asn Pro Trp Pro Gln Gly Tyr Val Ile Glu Trp Gly
 450 455 460
 Leu Gly Pro Pro Ser Ala Ser Asn Ser Asn Lys Thr Trp Arg Met Glu
 465 470 475 480
 Gln Asn Gly Arg Ala Thr Gly Phe Leu Leu Lys Glu Asn Ile Arg Pro
 485 490 495
 Phe Gln Leu Tyr Glu Ile Ile Val Thr Pro Leu Tyr Gln Asp Thr Met
 500 505 510
 Gly Pro Ser Gln His Val Tyr Ala Tyr Ser Gln Glu Met Ala Pro Ser
 515 520 525
 His Ala Pro Glu Leu His Leu Lys His Ile Gly Lys Thr Trp Ala Gln
 530 535 540
 Leu Glu Trp Val Pro Glu Pro Pro Glu Leu Gly Lys Ser Pro Leu Thr
 545 550 555 560
 His Tyr Thr Ile Phe Trp Thr Asn Ala Gln Asn Gln Ser Phe Ser Ala
 565 570 575
 Ile Leu Asn Ala Ser Ser Arg Gly Phe Val Leu His Gly Leu Glu Pro
 580 585 590
 Ala Ser Leu Tyr His Ile His Leu Met Ala Ala Ser Gln Ala Gly Ala
 595 600 605
 Thr Asn Ser Thr Val Leu Thr Leu Met Thr Leu Thr Pro Glu Gly Ser
 610 615 620

Glu Leu His Ile Ile Leu Gly Leu Phe Gly Leu Leu Leu Leu Thr
 625 630 635 640

Cys Leu Cys Gly Thr Ala Trp Leu Cys Cys Ser Pro Asn Arg Lys Asn
 645 650 655

Pro Leu Trp Pro Ser Val Pro Asp Pro Ala His Ser Ser Leu Gly Ser
 660 665 670

Trp Val Pro Thr Ile Met Glu Glu Asp Ala Phe Gln Leu Pro Gly Leu
 675 680 685

Gly Thr Pro Pro Ile Thr Lys Leu Thr Val Leu Glu Glu Asp Glu Lys
 690 695 700

Lys Pro Val Pro Trp Glu Ser His Asn Ser Ser Glu Thr Cys Gly Leu
 705 710 715 720

Pro Thr Leu Val Gln Thr Tyr Val Leu Gln Gly Asp Pro Arg Ala Val
 725 730 735

Ser Thr Gln Pro Gln Ser Gln Ser Gly Thr Ser Asp Gln Val Leu Tyr
 740 745 750

Gly Gln Leu Leu Gly Ser Pro Thr Ser Pro Gly Pro Gly His Tyr Leu
 755 760 765

Arg Cys Asp Ser Thr Gln Pro Leu Leu Ala Gly Leu Thr Pro Ser Pro
 770 775 780

Lys Ser Tyr Glu Asn Leu Trp Phe Gln Ala Ser Pro Leu Gly Thr Leu
 785 790 795 800

Val Thr Pro Ala Pro Ser Gln Glu Asp Asp Cys Val Phe Gly Pro Leu
 805 810 815

Leu Asn Phe Pro Leu Leu Gln Gly Ile Arg Val His Gly Met Glu Ala
 820 825 830

Leu Gly Ser Phe
 835

<210> 2989

<211> 276

<212> PRT

<213> Homo sapiens

<400> 2989

Met Gly Asn Ser Met Lys Ser Thr Pro Ala Pro Ala Glu Arg Pro Leu
 1 5 10 15

Pro Asn Pro Glu Gly Leu Asp Ser Asp Phe Leu Ala Val Leu Ser Asp
 20 25 30

Tyr Pro Ser Pro Asp Ile Ser Pro Pro Ile Phe Arg Arg Gly Glu Lys
 35 40 45

Leu Arg Val Ile Ser Asp Glu Gly Gly Trp Trp Lys Ala Ile Ser Leu
 50 55 60

Ser Thr Gly Arg Glu Ser Tyr Ile Pro Gly Ile Cys Val Ala Arg Val
 65 70 75 80

Tyr His Gly Trp Leu Phe Glu Gly Leu Gly Arg Asp Lys Ala Glu Glu
 85 90 95

Leu Leu Gln Leu Pro Asp Thr Lys Val Gly Ser Phe Met Ile Arg Glu
 100 105 110

Ser Glu Thr Lys Lys Gly Phe Tyr Ser Leu Ser Val Arg His Arg Gln
 115 120 125

Val Lys His Tyr Arg Ile Phe Arg Leu Pro Asn Asn Trp Tyr Tyr Ile
 130 135 140

Ser Pro Arg Leu Thr Phe Gln Cys Leu Glu Asp Leu Val Asn His Tyr
 145 150 155 160

Ser Glu Val Ala Asp Gly Leu Cys Cys Val Leu Thr Thr Pro Cys Leu
 165 170 175

Thr Gln Ser Thr Ala Ala Pro Ala Val Arg Ala Ser Ser Ser Pro Val
 180 185 190

Thr Leu Arg Gln Lys Thr Val Asp Trp Arg Arg Val Ser Arg Leu Gln
 195 200 205

Glu Asp Pro Glu Gly Thr Glu Asn Pro Leu Gly Val Asp Glu Ser Leu
 210 215 220

Phe Ser Tyr Gly Leu Arg Glu Ser Ile Ala Ser Tyr Leu Ser Leu Thr
 225 230 235 240

Ser Glu Asp Asn Thr Ser Phe Asp Arg Lys Lys Lys Ser Ile Ser Leu
 245 250 255

Met Tyr Gly Gly Ser Lys Arg Lys Ser Ser Phe Phe Ser Ser Pro Pro
 260 265 270

Tyr Phe Glu Asp
 275

<210> 2990

<211> 359

<212> PRT

<213> Homo sapiens

<400> 2990

Met Ala Pro Asn Gly Thr Ala Ser Ser Phe Cys Leu Asp Ser Thr Ala
 1 5 10 15

Cys Lys Ile Thr Ile Thr Val Val Leu Ala Val Leu Ile Leu Ile Thr
 20 25 30

Val Ala Gly Asn Val Val Val Cys Leu Ala Val Gly Leu Asn Arg Arg
 35 40 45

Leu Arg Asn Leu Thr Asn Cys Phe Ile Val Ser Leu Ala Ile Thr Asp
 50 55 60

Leu Leu Leu Gly Leu Leu Val Leu Pro Phe Ser Ala Ile Tyr Gln Leu
 65 70 75 80

Ser Cys Lys Trp Ser Phe Gly Lys Val Phe Cys Asn Ile Tyr Thr Ser
 85 90 95

Leu Asp Val Met Leu Cys Thr Ala Ser Ile Leu Asn Leu Phe Met Ile
 100 105 110

Ser Leu Asp Arg Tyr Cys Ala Val Met Asp Pro Leu Arg Tyr Pro Val
 115 120 125

Leu Val Thr Pro Val Arg Val Ala Ile Ser Leu Val Leu Ile Trp Val
 130 135 140

Ile Ser Ile Thr Leu Ser Phe Leu Ser Ile His Leu Gly Trp Asn Ser
 145 150 155 160

Arg Asn Glu Thr Ser Lys Gly Asn His Thr Thr Ser Lys Cys Lys Val

165

170

175

Gln Val Asn Glu Val Tyr Gly Leu Val Asp Gly Leu Val Thr Phe Tyr
 180 185 190

Leu Pro Leu Leu Ile Met Cys Ile Thr Tyr Tyr Arg Ile Phe Lys Val
 195 200 205

Ala Arg Asp Gln Ala Lys Arg Ile Asn His Ile Ser Ser Trp Lys Ala
 210 215 220

Ala Thr Ile Arg Glu His Lys Ala Thr Val Thr Leu Ala Ala Val Met
 225 230 235 240

Gly Ala Phe Ile Ile Cys Trp Phe Pro Tyr Phe Thr Ala Phe Val Tyr
 245 250 255

Arg Gly Leu Arg Gly Asp Asp Ala Ile Asn Glu Val Leu Glu Ala Ile
 260 265 270

Val Leu Trp Leu Gly Tyr Ala Asn Ser Ala Leu Asn Pro Ile Leu Tyr
 275 280 285

Ala Ala Leu Asn Arg Asp Phe Arg Thr Gly Tyr Gln Gln Leu Phe Cys
 290 295 300

Cys Arg Leu Ala Asn Arg Asn Ser His Lys Thr Ser Leu Arg Ser Asn
 305 310 315 320

Ala Ser Gln Leu Ser Arg Thr Gln Ser Arg Glu Pro Arg Gln Gln Glu
 325 330 335

Glu Lys Pro Leu Lys Leu Gln Val Trp Ser Gly Thr Glu Val Thr Ala
 340 345 350

Pro Gln Gly Ala Thr Asp Arg
 355

<210> 2991

<211> 505

<212> PRT

<213> Homo sapiens

<400> 2991

Met Gly Ser Met Lys Ser Lys Phe Leu Gln Val Gly Gly Asn Thr Phe
 1 5 10 15

Ser Lys Thr Glu Thr Ser Ala Ser Pro His Cys Pro Val Tyr Val Pro
 20 25 30

Asp Pro Thr Ser Thr Ile Lys Pro Gly Pro Asn Ser His Asn Ser Asn
 35 40 45

Thr Pro Gly Ile Arg Glu Ala Gly Ser Glu Asp Ile Ile Val Val Ala
 50 55 60

Leu Tyr Asp Tyr Glu Ala Ile His His Glu Asp Leu Ser Phe Gln Lys
 65 70 75 80

Gly Asp Gln Met Val Val Leu Glu Glu Ser Gly Glu Trp Trp Lys Ala
 85 90 95

Arg Ser Leu Ala Thr Arg Lys Glu Gly Tyr Ile Pro Ser Asn Tyr Val
 100 105 110

Ala Arg Val Asp Ser Leu Glu Thr Glu Glu Trp Phe Phe Lys Gly Ile
 115 120 125

Ser Arg Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro Gly Asn Met Leu
 130 135 140

Gly Ser Phe Met Ile Arg Asp Ser Glu Thr Thr Lys Gly Ser Tyr Ser
 145 150 155 160

Leu Ser Val Arg Asp Tyr Asp Pro Arg Gln Gly Asp Thr Val Lys His
 165 170 175

Tyr Lys Ile Arg Thr Leu Asp Asn Gly Gly Phe Tyr Ile Ser Pro Arg
 180 185 190

Ser Thr Phe Ser Thr Leu Gln Glu Leu Val Asp His Tyr Lys Lys Gly
 195 200 205

Asn Asp Gly Leu Cys Gln Lys Leu Ser Val Pro Cys Met Ser Ser Lys
 210 215 220

Pro Gln Lys Pro Trp Glu Lys Asp Ala Trp Glu Ile Pro Arg Glu Ser
 225 230 235 240

Leu Lys Leu Glu Lys Lys Leu Gly Ala Gly Gln Phe Gly Glu Val Trp
 245 250 255

Met Ala Thr Tyr Asn Lys His Thr Lys Val Ala Val Lys Thr Met Lys
 260 265 270

Pro Gly Ser Met Ser Val Glu Ala Phe Leu Ala Glu Ala Asn Val Met
 275 280 285

Lys Thr Leu Gln His Asp Lys Leu Val Lys Leu His Ala Val Val Thr
 290 295 300

Lys Glu Pro Ile Tyr Ile Ile Thr Glu Phe Met Ala Lys Gly Ser Leu
 305 310 315 320

Leu Asp Phe Leu Lys Ser Asp Glu Gly Ser Lys Gln Pro Leu Pro Lys
 325 330 335

Leu Ile Asp Phe Ser Ala Gln Ile Ala Glu Gly Met Ala Phe Ile Glu
 340 345 350

Gln Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val
 355 360 365

Ser Ala Ser Leu Val Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Val
 370 375 380

Ile Glu Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys Phe Pro Ile
 385 390 395 400

Lys Trp Thr Ala Pro Glu Ala Ile Asn Phe Gly Ser Phe Thr Ile Lys
 405 410 415

Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Met Glu Ile Val Thr Tyr
 420 425 430

Gly Arg Ile Pro Tyr Pro Gly Met Ser Asn Pro Glu Val Ile Arg Ala
 435 440 445

Leu Glu Arg Gly Tyr Arg Met Pro Arg Pro Glu Asn Cys Pro Glu Glu
 450 455 460

Leu Tyr Asn Ile Met Met Arg Cys Trp Lys Asn Arg Pro Glu Glu Arg
 465 470 475 480

Pro Thr Phe Glu Tyr Ile Gln Ser Val Leu Asp Asp Phe Tyr Thr Ala
 485 490 495

Thr Glu Ser Gln Tyr Gln Gln Gln Pro

500

505

<210> 2992
 <211> 1333
 <212> PRT
 <213> Homo sapiens

<400> 2992

Met Thr Ala Asp Lys Leu Val Phe Phe Val Asn Gly Arg Lys Val Val
 1 5 10 15

Glu Lys Asn Ala Asp Pro Glu Thr Thr Leu Leu Ala Tyr Leu Arg Arg
 20 25 30

Lys Leu Gly Leu Ser Gly Thr Lys Leu Gly Cys Gly Glu Gly Gly Cys
 35 40 45

Gly Ala Cys Thr Val Met Leu Ser Lys Tyr Asp Arg Leu Gln Asn Lys
 50 55 60

Ile Val His Phe Ser Ala Asn Ala Cys Leu Ala Pro Ile Cys Ser Leu
 65 70 75 80

His His Val Ala Val Thr Thr Val Glu Gly Ile Gly Ser Thr Lys Thr
 85 90 95

Arg Leu His Pro Val Gln Glu Arg Ile Ala Lys Ser His Gly Ser Gln
 100 105 110

Cys Gly Phe Cys Thr Pro Gly Ile Val Met Ser Met Tyr Thr Leu Leu
 115 120 125

Arg Asn Gln Pro Glu Pro Thr Met Glu Glu Ile Glu Asn Ala Phe Gln
 130 135 140

Gly Asn Leu Cys Arg Cys Thr Gly Tyr Arg Pro Ile Leu Gln Gly Phe
 145 150 155 160

Arg Thr Phe Ala Arg Asp Gly Gly Cys Cys Gly Gly Asp Gly Asn Asn
 165 170 175

Pro Asn Cys Cys Met Asn Gln Lys Lys Asp His Ser Val Ser His Ser
 180 185 190

Pro Ser Leu Phe Lys Pro Glu Glu Phe Thr Pro Leu Asp Pro Thr Gln
 195 200 205

Glu Pro Ile Phe Pro Pro Glu Leu Leu Arg Leu Lys Asp Thr Pro Arg
 210 215 220

Lys Gln Leu Arg Phe Glu Arg Glu Arg Val Thr Trp Ile Gln Ala Ser
 225 230 235 240

Thr Leu Lys Glu Leu Leu Asp Leu Lys Ala Gln His Pro Asp Ala Lys
 245 250 255

Leu Val Val Gly Asn Thr Glu Ile Gly Ile Glu Met Lys Phe Lys Asn
 260 265 270

Met Leu Phe Pro Met Ile Val Cys Pro Ala Trp Ile Pro Glu Leu Asn
 275 280 285

Ser Val Glu His Gly Pro Asp Gly Ile Ser Phe Gly Ala Ala Cys Pro
 290 295 300

Leu Ser Ile Val Glu Lys Thr Leu Val Asp Ala Val Ala Lys Leu Pro
 305 310 315 320

Ala Gln Lys Thr Glu Val Phe Arg Gly Val Leu Glu Gln Leu Arg Trp
 325 330 335

Phe Ala Gly Lys Gln Val Lys Ser Val Ala Ser Val Gly Gly Asn Ile
 340 345 350

Ile Thr Ala Ser Pro Ile Ser Asp Leu Asn Pro Val Phe Met Ala Ser
 355 360 365

Gly Ala Lys Leu Thr Leu Val Ser Arg Gly Thr Arg Arg Thr Val Gln
 370 375 380

Met Asp His Thr Phe Phe Pro Gly Tyr Arg Lys Thr Leu Leu Ser Pro
 385 390 395 400

Glu Glu Ile Leu Leu Ser Ile Glu Ile Pro Tyr Ser Arg Glu Gly Glu
 405 410 415

Tyr Phe Ser Ala Phe Lys Gln Ala Ser Arg Arg Glu Asp Asp Ile Ala
 420 425 430

Lys Val Thr Ser Gly Met Arg Val Leu Phe Lys Pro Gly Thr Thr Glu
 435 440 445

Val Gln Glu Leu Ala Leu Cys Tyr Gly Gly Met Ala Asn Arg Thr Ile
 450 455 460

Ser Ala Leu Lys Thr Thr Gln Arg Gln Leu Ser Lys Leu Trp Lys Glu
 465 470 475 480

Glu Leu Leu Gln Asp Val Cys Ala Gly Leu Ala Glu Glu Leu His Leu
 485 490 495

Pro Pro Asp Ala Pro Gly Gly Met Val Asp Phe Arg Cys Thr Leu Thr
 500 505 510

Leu Ser Phe Phe Phe Lys Phe Tyr Leu Thr Val Leu Gln Lys Leu Gly
 515 520 525

Gln Glu Asn Leu Glu Asp Lys Cys Gly Lys Leu Asp Pro Thr Phe Ala
 530 535 540

Ser Ala Thr Leu Leu Phe Gln Lys Asp Pro Pro Ala Asp Val Gln Leu
 545 550 555 560

Phe Gln Glu Val Pro Lys Gly Gln Ser Glu Glu Asp Met Val Gly Arg
 565 570 575

Pro Leu Pro His Leu Ala Ala Asp Met Gln Ala Ser Gly Glu Ala Val
 580 585 590

Tyr Cys Asp Asp Ile Pro Arg Tyr Glu Asn Glu Leu Ser Leu Arg Leu
 595 600 605

Val Thr Ser Thr Arg Ala His Ala Lys Ile Lys Ser Ile Asp Thr Ser
 610 615 620

Glu Ala Lys Lys Val Pro Gly Phe Val Cys Phe Ile Ser Ala Asp Asp
 625 630 635 640

Val Pro Gly Ser Asn Ile Thr Gly Ile Cys Asn Asp Glu Thr Val Phe
 645 650 655

Ala Lys Asp Lys Val Thr Cys Val Gly His Ile Ile Gly Ala Val Val
 660 665 670

Ala Asp Thr Pro Glu His Thr Gln Arg Ala Ala Gln Gly Val Lys Ile
 675 680 685

Thr Tyr Glu Glu Leu Pro Ala Ile Ile Thr Ile Glu Asp Ala Ile Lys

690	695	700
Asn Asn Ser Phe Tyr Gly Pro Glu Leu Lys Ile Glu Lys Gly Asp Leu 705 710 715 720		
Lys Lys Gly Phe Ser Glu Ala Asp Asn Val Val Ser Gly Glu Ile Tyr 725 730 735		
Ile Gly Gly Gln Glu His Phe Tyr Leu Glu Thr His Cys Thr Ile Ala 740 745 750		
Val Pro Lys Gly Glu Ala Gly Glu Met Glu Leu Phe Val Ser Thr Gln 755 760 765		
Asn Thr Met Lys Thr Gln Ser Phe Val Ala Lys Met Leu Gly Val Pro 770 775 780		
Ala Asn Arg Ile Val Val Arg Val Lys Arg Met Gly Gly Gly Phe Gly 785 790 795 800		
Gly Lys Glu Thr Arg Ser Thr Val Val Ser Thr Ala Val Ala Leu Ala 805 810 815		
Ala Tyr Lys Thr Gly Arg Pro Val Arg Cys Met Leu Asp Arg Asp Glu 820 825 830		
Asp Met Leu Ile Thr Gly Gly Arg His Pro Phe Leu Ala Arg Tyr Lys 835 840 845		
Val Gly Phe Met Lys Thr Gly Thr Val Val Ala Leu Glu Val Asp His 850 855 860		
Phe Ser Asn Val Gly Asn Thr Gln Asp Leu Ser Gln Ser Ile Met Glu 865 870 875 880		
Arg Ala Leu Phe His Met Asp Asn Cys Tyr Lys Ile Pro Asn Ile Arg 885 890 895		
Gly Thr Gly Arg Leu Cys Lys Thr Asn Leu Pro Ser Asn Thr Ala Phe 900 905 910		
Arg Gly Phe Gly Gly Pro Gln Gly Met Leu Ile Ala Glu Cys Trp Met 915 920 925		
Ser Glu Val Ala Val Thr Cys Gly Met Pro Ala Glu Glu Val Arg Arg 930 935 940		

Lys Asn Leu Tyr Lys Glu Gly Asp Leu Thr His Phe Asn Gln Lys Leu
 945 950 955 960
 Glu Gly Phe Thr Leu Pro Arg Cys Trp Glu Glu Cys Leu Ala Ser Ser
 965 970 975
 Gln Tyr His Ala Arg Lys Ser Glu Val Asp Lys Phe Asn Lys Glu Asn
 980 985 990
 Cys Trp Lys Lys Arg Gly Leu Cys Ile Ile Pro Thr Lys Phe Gly Ile
 995 1000 1005
 Ser Phe Thr Val Pro Phe Leu Asn Gln Ala Gly Ala Leu Leu His
 1010 1015 1020
 Val Tyr Thr Asp Gly Ser Val Leu Leu Thr His Gly Gly Thr Glu
 1025 1030 1035
 Met Gly Gln Gly Leu His Thr Lys Met Val Gln Val Ala Ser Arg
 1040 1045 1050
 Ala Leu Lys Ile Pro Thr Ser Lys Ile Tyr Ile Ser Glu Thr Ser
 1055 1060 1065
 Thr Asn Thr Val Pro Asn Thr Ser Pro Thr Ala Ala Ser Val Ser
 1070 1075 1080
 Ala Asp Leu Asn Gly Gln Ala Val Tyr Ala Ala Cys Gln Thr Ile
 1085 1090 1095
 Leu Lys Arg Leu Glu Pro Tyr Lys Lys Lys Asn Pro Ser Gly Ser
 1100 1105 1110
 Trp Glu Asp Trp Val Thr Ala Ala Tyr Met Asp Thr Val Ser Leu
 1115 1120 1125
 Ser Ala Thr Gly Phe Tyr Arg Thr Pro Asn Leu Gly Tyr Ser Phe
 1130 1135 1140
 Glu Thr Asn Ser Gly Asn Arg Phe His Tyr Phe Ser Tyr Gly Val
 1145 1150 1155
 Ala Cys Ser Glu Val Glu Ile Asp Cys Leu Thr Gly Asp His Lys
 1160 1165 1170

Asn Leu Arg Thr Asp Ile Val Met Asp Val Gly Ser Ser Leu Asn
1175 1180 1185

Pro Ala Ile Asp Ile Gly Gln Val Glu Gly Ala Phe Val Gln Gly
1190 1195 1200

Leu Gly Leu Phe Thr Leu Glu Glu Leu His Tyr Ser Pro Glu Gly
1205 1210 1215

Ser Leu His Thr Arg Gly Pro Ser Thr Tyr Lys Ile Pro Ala Phe
1220 1225 1230

Gly Ser Ile Pro Ile Glu Phe Arg Val Ser Leu Leu Arg Asp Cys
1235 1240 1245

Pro Asn Lys Lys Ala Ile Tyr Ala Ser Lys Ala Val Gly Glu Pro
1250 1255 1260

Pro Leu Phe Leu Ala Ala Ser Ile Phe Phe Ala Ile Lys Asp Ala
1265 1270 1275

Ile Arg Ala Ala Arg Ala Gln His Thr Gly Asn Asn Val Lys Glu
1280 1285 1290

Leu Phe Arg Leu Asp Ser Pro Ala Thr Pro Glu Lys Ile Arg Asn
1295 1300 1305

Ala Cys Val Asp Lys Phe Thr Thr Leu Cys Val Thr Gly Val Pro
1310 1315 1320

Glu Asn Cys Lys Pro Trp Ser Val Arg Val
1325 1330

<210> 2993

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2993

Met Glu Gly Lys Ala Ile Ala Thr Ser Leu Gly Gly Asp Arg Val Leu
1 5 10 15

Ile Phe Pro Cys Ser Pro Arg Ser Ser Phe Val Phe Thr Ser Arg Leu
20 25 30

Ser Ser Leu Pro Leu Lys Arg Ala Ser Ile Gly Gly Ala Val Ser Cys

35	40	45
Ser Gly Val Asn Gly Leu Thr Arg Trp Asn Ser Ile Val Ser Thr Arg 50 55 60		
Arg Leu Val Pro Val Arg Ser Ile Asn Ser Glu Ser Asp Ser Asp Ser 65 70 75 80		
Asp Phe Pro His Glu Asn Gln Gln Gly Asn Pro Gly Leu Gly Lys Phe 85 90 95		
Lys Glu Tyr Gln Glu Trp Asp Ser Trp Thr Ala Lys Phe Ser Gly Gly 100 105 110		
Ala Asn Ile Pro Phe Leu Met Leu Gln Leu Pro Gln Ile Ile Leu Asn 115 120 125		
Thr Gln Asn Leu Leu Ala Gly Asn Asn Thr Ala Leu Ser Ala Val Pro 130 135 140		
Trp Leu Gly Met Leu Thr Gly Leu Leu Gly Asn Leu Ser Leu Leu Ser 145 150 155 160		
Tyr Phe Ala Lys Lys Arg Glu Lys Glu Ala Ala Val Val Gln Thr Leu 165 170 175		
Gly Val Val Ser Thr His Ile Val Leu Ala Gln Leu Thr Met Ala Glu 180 185 190		
Ala Met Pro Ile Gln Tyr Phe Val Ala Thr Ser Ala Val Val Thr Ile 195 200 205		
Gly Leu Ile Val Asn Cys Leu Tyr Tyr Phe Gly Lys Leu Ser Lys Thr 210 215 220		
Val Trp Gln Leu Trp Glu Asp Val Ile Thr Ile Gly Gly Leu Ser Val 225 230 235 240		
Leu Pro Gln Ile Met Trp Ser Thr Phe Val Pro Leu Val Pro Asn Ser 245 250 255		
Ile Leu Pro Gly Thr Thr Ala Phe Gly Ile Ala Val Ala Ala Ile Ile 260 265 270		
Met Ala Arg Thr Gly Lys Leu Ser Glu Lys Gly Val Arg Phe Val Gly 275 280 285		

Ser Leu Ser Gly Trp Thr Ala Thr Leu Met Phe Met Trp Met Pro Val
 290 295 300

Ser Gln Met Trp Thr Asn Phe Leu Asn Pro Asp Asn Ile Lys Gly Leu
 305 310 315 320

Ser Ser Ile Thr Met Leu Leu Ser Met Met Gly Asn Gly Leu Met Ile
 325 330 335

Pro Arg Ala Leu Phe Ile Arg Asp Leu Met Trp Leu Thr Gly Ser Leu
 340 345 350

Trp Ala Thr Leu Phe Tyr Gly Tyr Gly Asn Ile Leu Cys Leu Tyr Leu
 355 360 365

Val Asn Cys Thr Ser Gln Ser Phe Phe Val Ala Ala Thr Ile Gly Leu
 370 375 380

Ile Ser Trp Ile Gly Leu Ala Leu Trp Arg Asp Ala Val Ala Tyr Gly
 385 390 395 400

His Asn Ser Pro Phe Arg Ser Leu Lys Glu Leu Val Phe Gly Pro
 405 410 415

<210> 2994

<211> 363

<212> PRT

<213> Homo sapiens

<400> 2994

Met Ala Gln Thr Pro Ala Phe Asp Lys Pro Lys Val Glu Leu His Val
 1 5 10 15

His Leu Asp Gly Ser Ile Lys Pro Glu Thr Ile Leu Tyr Tyr Gly Arg
 20 25 30

Arg Arg Gly Ile Ala Leu Pro Ala Asn Thr Ala Glu Gly Leu Leu Asn
 35 40 45

Val Ile Gly Met Asp Lys Pro Leu Thr Leu Pro Asp Phe Leu Ala Lys
 50 55 60

Phe Asp Tyr Tyr Met Pro Ala Ile Ala Gly Cys Arg Glu Ala Ile Lys
 65 70 75 80

Arg Ile Ala Tyr Glu Phe Val Glu Met Lys Ala Lys Glu Gly Val Val
 85 90 95

Tyr Val Glu Val Arg Tyr Ser Pro His Leu Leu Ala Asn Ser Lys Val
 100 105 110

Glu Pro Ile Pro Trp Asn Gln Ala Glu Gly Asp Leu Thr Pro Asp Glu
 115 120 125

Val Val Ala Leu Val Gly Gln Gly Leu Gln Glu Gly Glu Arg Asp Phe
 130 135 140

Gly Val Lys Ala Arg Ser Ile Leu Cys Cys Met Arg His Gln Pro Asn
 145 150 155 160

Trp Ser Pro Lys Val Val Glu Leu Cys Lys Asn Tyr Gln Gln Gln Thr
 165 170 175

Val Val Ala Ile Asp Leu Ala Gly Asp Glu Thr Ile Pro Gly Ser Ser
 180 185 190

Leu Leu Pro Gly His Val Gln Ala Tyr Gln Glu Ala Val Lys Ser Gly
 195 200 205

Ile His Arg Thr Val His Ala Gly Glu Val Gly Ser Ala Glu Val Val
 210 215 220

Lys Glu Ala Val Asp Ile Leu Lys Thr Glu Arg Leu Gly His Gly Tyr
 225 230 235 240

His Thr Leu Glu Asp Gln Ala Leu Tyr Asn Arg Leu Arg Gln Glu Asn
 245 250 255

Met His Phe Glu Ile Cys Pro Trp Ser Ser Tyr Leu Thr Gly Ala Trp
 260 265 270

Lys Pro Asp Thr Glu His Ala Val Ile Arg Leu Lys Asn Asp Gln Ala
 275 280 285

Asn Tyr Ser Leu Asn Thr Asp Asp Pro Leu Ile Phe Lys Ser Thr Leu
 290 295 300

Asp Thr Asp Tyr Gln Met Thr Lys Arg Asp Met Gly Phe Thr Glu Glu
 305 310 315 320

Glu Phe Lys Arg Leu Asn Ile Asn Ala Ala Lys Ser Ser Phe Leu Pro

325

330

335

Glu Asp Glu Lys Arg Glu Leu Leu Asp Leu Leu Tyr Lys Ala Tyr Gly
 340 345 350

Met Pro Pro Ser Ala Ser Ala Gly Gln Asn Leu
 355 360

<210> 2995

<211> 691

<212> PRT

<213> Homo sapiens

<400> 2995

Met Met Arg Asn His Arg Ile Ala Ser Ser Leu Cys Gly Asp Gln Val
 1 5 10 15

Phe Ser Lys Lys Lys Lys Lys Lys Lys Asn Asn Met Ala Ala Lys
 20 25 30

Glu Lys Leu Glu Ala Val Leu Asn Val Ala Leu Arg Val Pro Ser Ile
 35 40 45

Met Leu Leu Asp Val Leu Tyr Arg Trp Asp Val Ser Ser Phe Phe Gln
 50 55 60

Gln Ile Gln Arg Ser Ser Leu Ser Asn Asn Pro Leu Phe Gln Tyr Lys
 65 70 75 80

Tyr Leu Ala Leu Asn Met His Tyr Val Gly Tyr Ile Leu Ser Val Val
 85 90 95

Leu Leu Thr Leu Pro Arg Gln His Leu Val Gln Leu Tyr Leu Tyr Phe
 100 105 110

Leu Thr Ala Leu Leu Leu Tyr Ala Gly His Gln Ile Ser Arg Asp Tyr
 115 120 125

Val Arg Ser Glu Leu Glu Phe Ala Tyr Glu Gly Pro Met Tyr Leu Glu
 130 135 140

Pro Leu Ser Met Asn Arg Phe Thr Thr Ala Leu Ile Gly Gln Leu Val
 145 150 155 160

Val Cys Thr Leu Cys Ser Cys Val Met Lys Thr Lys Gln Ile Trp Leu
 165 170 175

Phe Ser Ala His Met Leu Pro Leu Leu Ala Arg Leu Cys Leu Val Pro
 180 185 190

Leu Glu Thr Ile Val Ile Ile Asn Lys Phe Ala Met Ile Phe Thr Gly
 195 200 205

Leu Glu Val Leu Tyr Phe Leu Gly Ser Asn Leu Leu Val Pro Tyr Asn
 210 215 220

Leu Ala Lys Ser Ala Tyr Arg Glu Leu Val Gln Val Val Glu Val Tyr
 225 230 235 240

Gly Leu Leu Ala Leu Gly Met Ser Leu Trp Asn Gln Leu Val Val Pro
 245 250 255

Val Leu Phe Met Val Phe Trp Leu Val Leu Phe Ala Leu Gln Ile Tyr
 260 265 270

Ser Tyr Phe Ser Thr Arg Asp Gln Pro Ala Ser Arg Glu Arg Leu Leu
 275 280 285

Phe Leu Phe Leu Thr Ser Ile Ala Glu Cys Cys Ser Thr Pro Tyr Ser
 290 295 300

Leu Leu Gly Leu Val Phe Thr Val Ser Phe Val Ala Leu Gly Val Leu
 305 310 315 320

Thr Leu Cys Lys Phe Tyr Leu Gln Gly Tyr Arg Ala Phe Met Asn Asp
 325 330 335

Pro Ala Met Asn Arg Gly Met Thr Glu Gly Val Thr Leu Leu Ile Leu
 340 345 350

Ala Val Gln Thr Gly Leu Ile Glu Leu Gln Val Val His Arg Ala Phe
 355 360 365

Leu Leu Ser Ile Ile Leu Phe Ile Val Val Ala Ser Ile Leu Gln Ser
 370 375 380

Met Leu Glu Ile Ala Asp Pro Ile Val Leu Ala Leu Gly Ala Ser Arg
 385 390 395 400

Asp Lys Ser Leu Trp Lys His Phe Arg Ala Val Ser Leu Cys Leu Phe
 405 410 415

Leu Leu Val Phe Pro Ala Tyr Met Ala Tyr Met Ile Cys Gln Phe Phe
 420 425 430
 His Met Asp Phe Trp Leu Leu Ile Ile Ile Ser Ser Ser Ile Leu Thr
 435 440 445
 Ser Leu Gln Val Leu Gly Thr Leu Phe Ile Tyr Val Leu Phe Met Val
 450 455 460
 Glu Glu Phe Arg Lys Glu Pro Val Glu Asn Met Asp Asp Val Ile Tyr
 465 470 475 480
 Tyr Val Asn Gly Thr Tyr Arg Leu Leu Glu Phe Leu Val Ala Leu Cys
 485 490 495
 Val Val Ala Tyr Gly Val Ser Glu Thr Ile Phe Gly Glu Trp Thr Val
 500 505 510
 Met Gly Ser Met Ile Ile Phe Ile His Ser Tyr Tyr Asn Val Trp Leu
 515 520 525
 Arg Ala Gln Leu Gly Trp Lys Ser Phe Leu Leu Arg Arg Asp Ala Val
 530 535 540
 Asn Lys Ile Lys Ser Leu Pro Ile Ala Thr Lys Glu Gln Leu Glu Lys
 545 550 555 560
 His Asn Asp Ile Cys Ala Ile Cys Tyr Gln Asp Met Lys Ser Ala Val
 565 570 575
 Ile Thr Pro Cys Ser His Phe Phe His Ala Gly Cys Leu Lys Lys Trp
 580 585 590
 Leu Tyr Val Gln Glu Thr Cys Pro Leu Cys His Cys His Leu Lys Asn
 595 600 605
 Ser Ser Gln Leu Pro Gly Leu Gly Thr Glu Pro Val Leu Gln Pro His
 610 615 620
 Ala Gly Ala Glu Gln Asn Val Met Phe Gln Glu Gly Thr Glu Pro Pro
 625 630 635 640
 Gly Gln Glu His Thr Pro Gly Thr Arg Ile Gln Glu Gly Ser Arg Asp
 645 650 655
 Asn Asn Glu Tyr Ile Ala Arg Arg Pro Asp Asn Gln Glu Gly Ala Phe

660

665

670

Asp Pro Lys Glu Tyr Pro His Ser Ala Lys Asp Glu Ala His Pro Val
 675 680 685

Glu Ser Ala
 690

<210> 2996
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 2996

Met Ala Ser Pro Ala Ile Gly Gln Arg Pro Tyr Pro Leu Leu Leu Asp
 1 5 10 15

Pro Glu Pro Pro Arg Tyr Leu Gln Ser Leu Ser Gly Pro Glu Leu Pro
 20 25 30

Pro Pro Pro Pro Asp Arg Ser Ser Arg Leu Cys Val Pro Ala Pro Leu
 35 40 45

Ser Thr Ala Pro Gly Ala Arg Glu Gly Arg Ser Ala Arg Arg Ala Ala
 50 55 60

Arg Gly Asn Leu Glu Pro Pro Pro Arg Ala Ser Arg Pro Ala Arg Pro
 65 70 75 80

Leu Arg Pro Gly Leu Gln Gln Arg Leu Arg Arg Arg Pro Gly Ala Pro
 85 90 95

Arg Pro Arg Asp Val Arg Ser Ile Phe Glu Gln Pro Gln Asp Pro Arg
 100 105 110

Val Pro Ala Glu Arg Gly Glu Gly His Cys Phe Ala Glu Leu Val Leu
 115 120 125

Pro Gly Gly Pro Gly Trp Cys Asp Leu Cys Gly Arg Glu Val Leu Arg
 130 135 140

Gln Ala Leu Arg Cys Thr Asn Cys Lys Phe Thr Cys His Pro Glu Cys
 145 150 155 160

Arg Ser Leu Ile Gln Leu Asp Cys Ser Gln Gln Glu Gly Leu Ser Arg
 165 170 175

Asp Arg Pro Ser Pro Glu Ser Thr Leu Thr Val Thr Phe Ser Gln Asn
 180 185 190

Val Cys Lys Pro Val Glu Glu Thr Gln Arg Pro Pro Thr Leu Gln Glu
 195 200 205

Ile Lys Gln Lys Ile Asp Ser Tyr Asn Thr Arg Glu Lys Asn Cys Leu
 210 215 220

Gly Met Lys Leu Ser Glu Asp Gly Thr Tyr Thr Gly Phe Ile Lys Val
 225 230 235 240

His Leu Lys Leu Arg Arg Pro Val Thr Val Pro Ala Gly Ile Arg Pro
 245 250 255

Gln Ser Ile Tyr Asp Ala Ile Lys Glu Val Asn Leu Ala Ala Thr Thr
 260 265 270

Asp Lys Arg Thr Ser Phe Tyr Leu Pro Leu Asp Ala Ile Lys Gln Leu
 275 280 285

His Ile Ser Ser Thr Thr Thr Val Ser Glu Val Ile Gln Gly Leu Leu
 290 295 300

Lys Lys Phe Met Val Val Asp Asn Pro Gln Lys Phe Ala Leu Phe Lys
 305 310 315 320

Arg Ile His Lys Asp Gly Gln Val Leu Phe Gln Lys Leu Ser Ile Ala
 325 330 335

Asp Arg Pro Leu Tyr Leu Arg Leu Leu Ala Gly Pro Asp Thr Glu Val
 340 345 350

Leu Ser Phe Val Leu Lys Glu Asn Glu Thr Gly Glu Val Glu Trp Asp
 355 360 365

Ala Phe Ser Ile Pro Glu Leu Gln Asn Phe Leu Ser Ser Trp Cys Ile
 370 375 380

Gln Ile Tyr Leu Tyr Tyr
 385 390

<210> 2997
 <211> 297
 <212> PRT
 <213> Homo sapiens

<400> 2997

Met Thr Thr Pro Arg Asn Ser Val Asn Gly Thr Phe Pro Ala Glu Pro
 1 5 10 15

Met Lys Gly Pro Ile Ala Met Gln Ser Gly Pro Lys Pro Leu Phe Arg
 20 25 30

Arg Met Ser Ser Leu Val Gly Pro Thr Gln Ser Phe Phe Met Arg Glu
 35 40 45

Ser Lys Thr Leu Gly Ala Val Gln Ile Met Asn Gly Leu Phe His Ile
 50 55 60

Ala Leu Gly Gly Leu Leu Met Ile Pro Ala Gly Ile Tyr Ala Pro Ile
 65 70 75 80

Cys Val Thr Val Trp Tyr Pro Leu Trp Gly Gly Ile Met Tyr Ile Ile
 85 90 95

Ser Gly Ser Leu Leu Ala Ala Thr Glu Lys Asn Ser Arg Lys Cys Leu
 100 105 110

Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
 115 120 125

Ser Gly Met Ile Leu Ser Ile Met Asp Ile Leu Asn Ile Lys Ile Ser
 130 135 140

His Phe Leu Lys Met Glu Ser Leu Asn Phe Ile Arg Ala His Thr Pro
 145 150 155 160

Tyr Ile Asn Ile Tyr Asn Cys Glu Pro Ala Asn Pro Ser Glu Lys Asn
 165 170 175

Ser Pro Ser Thr Gln Tyr Cys Tyr Ser Ile Gln Ser Leu Phe Leu Gly
 180 185 190

Ile Leu Ser Val Met Leu Ile Phe Ala Phe Phe Gln Glu Leu Val Ile
 195 200 205

Ala Gly Ile Val Glu Asn Glu Trp Lys Arg Thr Cys Ser Arg Pro Lys
 210 215 220

Ser Asn Ile Val Leu Leu Ser Ala Glu Glu Lys Lys Glu Gln Thr Ile
 225 230 235 240

Glu Ile Lys Glu Glu Val Val Gly Leu Thr Glu Thr Ser Ser Gln Pro
 245 250 255

Lys Asn Glu Glu Asp Ile Glu Ile Ile Pro Ile Gln Glu Glu Glu
 260 265 270

Glu Glu Thr Glu Thr Asn Phe Pro Glu Pro Pro Gln Asp Gln Glu Ser
 275 280 285

Ser Pro Ile Glu Asn Asp Ser Ser Pro
 290 295

<210> 2998

<211> 261

<212> PRT

<213> Homo sapiens

<400> 2998

Met Ser Trp Lys Lys Ala Leu Arg Ile Pro Gly Gly Leu Arg Ala Ala
 1 5 10 15

Thr Val Thr Leu Met Leu Ser Met Leu Ser Thr Pro Val Ala Glu Gly
 20 25 30

Arg Asp Ser Pro Glu Asp Phe Val Tyr Gln Phe Lys Gly Met Cys Tyr
 35 40 45

Phe Thr Asn Gly Thr Glu Arg Val Arg Leu Val Ser Arg Ser Ile Tyr
 50 55 60

Asn Arg Glu Glu Ile Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg
 65 70 75 80

Ala Val Thr Leu Leu Gly Leu Pro Ala Ala Glu Tyr Trp Asn Ser Gln
 85 90 95

Lys Asp Ile Leu Glu Arg Lys Arg Ala Ala Val Asp Arg Val Cys Arg
 100 105 110

His Asn Tyr Gln Leu Glu Leu Arg Thr Thr Leu Gln Arg Arg Val Glu
 115 120 125

Pro Thr Val Thr Ile Ser Pro Ser Arg Thr Glu Ala Leu Asn His His
 130 135 140

Asn Leu Leu Val Cys Ser Val Thr Asp Phe Tyr Pro Ala Gln Ile Lys
 145 150 155 160

Val Arg Trp Phe Arg Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser
 165 170 175

Thr Pro Leu Ile Arg Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met
 180 185 190

Leu Glu Met Thr Pro Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu
 195 200 205

His Pro Ser Leu Gln Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser
 210 215 220

Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Ile Gly Gly Phe Val Leu
 225 230 235 240

Gly Leu Ile Phe Leu Gly Leu Gly Leu Ile Ile His His Arg Ser Gln
 245 250 255

Lys Gly Leu Leu His
 260

<210> 2999

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2999

Met Met Val Leu Gln Val Ser Ala Ala Pro Arg Thr Val Ala Leu Thr
 1 5 10 15

Ala Leu Leu Met Val Leu Leu Thr Ser Val Val Gln Gly Arg Ala Thr
 20 25 30

Pro Glu Asn Tyr Leu Phe Gln Gly Arg Gln Glu Cys Tyr Ala Phe Asn
 35 40 45

Gly Thr Gln Arg Phe Leu Glu Arg Tyr Ile Tyr Asn Arg Glu Glu Phe
 50 55 60

Ala Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr Glu Leu
 65 70 75 80

Gly Arg Pro Ala Ala Glu Tyr Trp Asn Ser Gln Lys Asp Ile Leu Glu
 85 90 95

Glu Lys Arg Ala Val Pro Asp Arg Met Cys Arg His Asn Tyr Glu Leu
 100 105 110

Gly Gly Pro Met Thr Leu Gln Arg Arg Val Gln Pro Arg Val Asn Val
 115 120 125

Ser Pro Ser Lys Lys Gly Pro Leu Gln His His Asn Leu Leu Val Cys
 130 135 140

His Val Thr Asp Phe Tyr Pro Gly Ser Ile Gln Val Arg Trp Phe Leu
 145 150 155 160

Asn Gly Gln Glu Glu Thr Ala Gly Val Val Ser Thr Asn Leu Ile Arg
 165 170 175

Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met Thr Pro
 180 185 190

Gln Gln Gly Asp Val Tyr Thr Cys Gln Val Glu His Thr Ser Leu Asp
 195 200 205

Ser Pro Val Thr Val Glu Trp Lys Ala Gln Ser Asp Ser Ala Arg Ser
 210 215 220

Lys Thr Leu Thr Gly Ala Gly Gly Phe Val Leu Gly Leu Ile Ile Cys
 225 230 235 240

Gly Val Gly Ile Phe Met His Arg Arg Ser Lys Lys Val Gln Arg Gly
 245 250 255

Ser Ala

<210> 3000

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3000

Met Thr Asp Cys Glu Phe Gly Tyr Ile Tyr Arg Leu Ala Gln Asp Tyr
 1 5 10 15

Leu Gln Cys Val Leu Gln Ile Pro Gln Pro Gly Ser Gly Pro Ser Lys
 20 25 30

Thr Ser Arg Val Leu Gln Asn Val Ala Phe Ser Val Gln Lys Glu Val
 35 40 45

Glu Lys Asn Leu Lys Ser Cys Leu Asp Asn Val Asn Val Val Ser Val
 50 55 60

Asp Thr Ala Arg Thr Leu Phe Asn Gln Val Met Glu Lys Glu Phe Glu
 65 70 75 80

Asp Gly Ile Ile Asn Trp Gly Arg Ile Val Thr Ile Phe Ala Phe Glu
 85 90 95

Gly Ile Leu Ile Lys Lys Leu Leu Arg Gln Gln Ile Ala Pro Asp Val
 100 105 110

Asp Thr Tyr Lys Glu Ile Ser Tyr Phe Val Ala Glu Phe Ile Met Asn
 115 120 125

Asn Thr Gly Glu Trp Ile Arg Gln Asn Gly Gly Trp Glu Asn Gly Phe
 130 135 140

Val Lys Lys Phe Glu Pro Lys Ser Gly Trp Met Thr Phe Leu Glu Val
 145 150 155 160

Thr Gly Lys Ile Cys Glu Met Leu Ser Leu Leu Lys Gln Tyr Cys
 165 170 175

<210> 3001

<211> 825

<212> PRT

<213> Homo sapiens

<400> 3001

Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val
 1 5 10 15

Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro
 20 25 30

Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met
 35 40 45

Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu
 50 55 60

Val Phe Leu Leu Ser Glu Ala His Thr Cys Ile Pro Glu Asn Asn Gly
 65 70 75 80

Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala
 85 90 95

Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys
 100 105 110

Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn
 115 120 125

Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser
 130 135 140

Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala
 145 150 155 160

Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn
 165 170 175

Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys
 180 185 190

Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr
 195 200 205

Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Ser
 210 215 220

Tyr Arg Glu Pro Phe Glu Gln His Leu Leu Leu Gly Val Ser Val Ser
 225 230 235 240

Cys Ile Val Ile Leu Ala Val Cys Leu Leu Cys Tyr Val Ser Ile Thr
 245 250 255

Lys Ile Lys Lys Glu Trp Trp Asp Gln Ile Pro Asn Pro Ala Arg Ser
 260 265 270

Arg Leu Val Ala Ile Ile Ile Gln Asp Ala Gln Gly Ser Gln Trp Glu
 275 280 285

Lys Arg Ser Arg Gly Gln Glu Pro Ala Lys Cys Pro His Trp Lys Asn
 290 295 300

Cys Leu Thr Lys Leu Leu Pro Cys Phe Leu Glu His Asn Met Lys Arg
 305 310 315 320

Asp Glu Asp Pro His Lys Ala Ala Lys Glu Met Pro Phe Gln Gly Ser
 325 330 335

Gly Lys Ser Ala Trp Cys Pro Val Glu Ile Ser Lys Thr Val Leu Trp
 340 345 350

Pro Glu Ser Ile Ser Val Val Arg Cys Val Glu Leu Phe Glu Ala Pro
 355 360 365

Val Glu Cys Glu Glu Glu Glu Val Glu Glu Glu Lys Gly Ser Phe
 370 375 380

Cys Ala Ser Pro Glu Ser Ser Arg Asp Asp Phe Gln Glu Gly Arg Glu
 385 390 395 400

Gly Ile Val Ala Arg Leu Thr Glu Ser Leu Phe Leu Asp Leu Leu Gly
 405 410 415

Glu Glu Asn Gly Gly Phe Cys Gln Gln Asp Met Gly Glu Ser Cys Leu
 420 425 430

Leu Pro Pro Ser Gly Ser Thr Ser Ala His Met Pro Trp Asp Glu Phe
 435 440 445

Pro Ser Ala Gly Pro Lys Glu Ala Pro Pro Trp Gly Lys Glu Gln Pro
 450 455 460

Leu His Leu Glu Pro Ser Pro Pro Ala Ser Pro Thr Gln Ser Pro Asp
 465 470 475 480

Asn Leu Thr Cys Thr Glu Thr Pro Leu Val Ile Ala Gly Asn Pro Ala
 485 490 495

Tyr Arg Ser Phe Ser Asn Ser Leu Ser Gln Ser Pro Cys Pro Arg Glu
 500 505 510

Leu Gly Pro Asp Pro Leu Leu Ala Arg His Leu Glu Glu Val Glu Pro
 515 520 525

Glu Met Pro Cys Val Pro Gln Leu Ser Glu Pro Thr Thr Val Pro Gln
 530 535 540

Pro Glu Pro Glu Thr Trp Glu Gln Ile Leu Arg Arg Asn Val Leu Gln
 545 550 555 560

His Gly Ala Ala Ala Ala Pro Val Ser Ala Pro Thr Ser Gly Tyr Gln
565 570 575

Glu Phe Val His Ala Val Glu Gln Gly Gly Thr Gln Ala Ser Ala Val
580 585 590

Val Gly Leu Gly Pro Pro Gly Glu Ala Gly Tyr Lys Ala Phe Ser Ser
595 600 605

Leu Leu Ala Ser Ser Ala Val Ser Pro Glu Lys Cys Gly Phe Gly Ala
610 615 620

Ser Ser Gly Glu Glu Gly Tyr Lys Pro Phe Gln Asp Leu Ile Pro Gly
625 630 635 640

Cys Pro Gly Asp Pro Ala Pro Val Pro Val Pro Leu Phe Thr Phe Gly
645 650 655

Leu Asp Arg Glu Pro Pro Arg Ser Pro Gln Ser Ser His Leu Pro Ser
660 665 670

Ser Ser Pro Glu His Leu Gly Leu Glu Pro Gly Glu Lys Val Glu Asp
675 680 685

Met Pro Lys Pro Pro Leu Pro Gln Glu Gln Ala Thr Asp Pro Leu Val
690 695 700

Asp Ser Leu Gly Ser Gly Ile Val Tyr Ser Ala Leu Thr Cys His Leu
705 710 715 720

Cys Gly His Leu Lys Gln Cys His Gly Gln Glu Asp Gly Gly Gln Thr
725 730 735

Pro Val Met Ala Ser Pro Cys Cys Gly Cys Cys Cys Gly Asp Arg Ser
740 745 750

Ser Pro Pro Thr Thr Pro Leu Arg Ala Pro Asp Pro Ser Pro Gly Gly
755 760 765

Val Pro Leu Glu Ala Ser Leu Cys Pro Ala Ser Leu Ala Pro Ser Gly
770 775 780

Ile Ser Glu Lys Ser Lys Ser Ser Ser Ser Phe His Pro Ala Pro Gly
785 790 795 800

Asn Ala Gln Ser Ser Ser Gln Thr Pro Lys Ile Val Asn Phe Val Ser

805

810

815

Val Gly Pro Thr Tyr Met Arg Val Ser
820 825

<210> 3002

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3002

Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
1 5 10 15

Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
20 25 30

Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu
35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys Leu Thr Val Val
50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly
85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu
100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn
115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln
130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys
145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser
165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr
180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met
 195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu
 210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu
 225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly
 245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu
 260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
 275 280 285

<210> 3003

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3003

Met Ala Val Thr Thr Arg Leu Thr Arg Leu His Glu Lys Ile Leu Gln
 1 5 10 15

Asn His Phe Gly Gly Lys Arg Leu Ser Leu Leu Tyr Lys Gly Ser Val
 20 25 30

His Gly Phe Arg Asn Gly Val Leu Leu Asp Arg Cys Cys Asn Gln Gly
 35 40 45

Pro Thr Leu Thr Val Ile Tyr Ser Glu Asp His Ile Ile Gly Ala Tyr
 50 55 60

Ala Glu Glu Ser Tyr Gln Glu Gly Lys Tyr Ala Ser Ile Ile Leu Phe
 65 70 75 80

Ala Leu Gln Asp Thr Lys Ile Ser Glu Trp Lys Leu Gly Leu Cys Thr
 85 90 95

Pro Glu Thr Leu Phe Cys Cys Asp Val Thr Lys Tyr Asn Ser Pro Thr
 100 105 110

Asn Phe Gln Ile Asp Gly Arg Asn Arg Lys Val Ile Met Asp Leu Lys

115	120	125
Thr Met Glu Asn Leu Gly	Leu Ala Gln Asn Cys	Thr Ile Ser Ile Gln
130	135	140
Asp Tyr Glu Val Phe Arg Cys Glu Asp Ser	Leu Asp Glu Arg Lys Ile	
145	150	155
Lys Gly Val Ile Glu Leu Arg Lys Ser Leu Leu Ser Ala Leu Arg Thr		
	165	170
		175
Tyr Glu Pro Tyr Gly Ser Leu Val Gln Gln Ile Arg Ile Leu Leu Leu		
	180	185
		190
Gly Pro Ile Gly Ala Gly Lys Ser Ser Phe Phe Asn Ser Val Arg Ser		
	195	200
		205
Val Phe Gln Gly His Val Thr His Gln Ala Leu Val Gly Thr Asn Thr		
	210	215
		220
Thr Gly Ile Ser Glu Lys Tyr Arg Thr Tyr Ser Ile Arg Asp Gly Lys		
	225	230
		235
Asp Gly Lys Tyr Leu Pro Phe Ile Leu Cys Asp Ser Leu Gly Leu Ser		
	245	250
		255
Glu Lys Glu Gly Gly Leu Cys Arg Asp Asp Ile Phe Tyr Ile Leu Asn		
	260	265
		270
Gly Asn Ile Arg Asp Arg Tyr Gln Phe Asn Pro Met Glu Ser Ile Lys		
	275	280
		285
Leu Asn His His Asp Tyr Ile Asp Ser Pro Ser Leu Lys Asp Arg Ile		
	290	295
		300
His Cys Val Ala Phe Val Phe Asp Ala Ser Ser Ile Gln Tyr Phe Ser		
	305	310
		315
Ser Gln Met Ile Val Lys Ile Lys Arg Ile Arg Arg Glu Leu Val Asn		
	325	330
		335
Ala Gly Val Val His Val Ala Leu Leu Thr His Val Asp Ser Met Asp		
	340	345
		350
Leu Ile Thr Lys Gly Asp Leu Ile Glu Ile Glu Arg Cys Glu Pro Val		
	355	360
		365

Arg Ser Lys Leu Glu Glu Val Gln Arg Lys Leu Gly Phe Ala Leu Ser
 370 375 380

Asp Ile Ser Val Val Ser Asn Tyr Ser Ser Glu Trp Glu Leu Asp Pro
 385 390 395 400

Val Lys Asp Val Leu Ile Leu Ser Ala Leu Arg Arg Met Leu Trp Ala
 405 410 415

Ala Asp Asp Phe Leu Glu Asp Leu Pro Phe Glu Gln Ile Gly Asn Leu
 420 425 430

Arg Glu Glu Ile Ile Asn Cys Ala Gln Gly Lys Lys
 435 440

<210> 3004

<211> 432

<212> PRT

<213> Homo sapiens

<400> 3004

Met Gly Pro Ala Gly Ser Leu Leu Gly Ser Gly Gln Met Gln Ile Thr
 1 5 10 15

Leu Trp Gly Ser Leu Ala Ala Val Ala Ile Phe Phe Val Ile Thr Phe
 20 25 30

Leu Ile Phe Pro Cys Ser Ser Cys Asp Arg Glu Lys Lys Pro Arg Gln
 35 40 45

His Ser Gly Asp His Glu Asn Leu Met Asn Val Pro Ser Asp Lys Glu
 50 55 60

Met Phe Ser Arg Ser Val Thr Ser Leu Ala Thr Asp Ala Pro Ala Ser
 65 70 75 80

Ser Glu Gln Asn Gly Ala Leu Thr Asn Gly Asp Ile Leu Ser Glu Asp
 85 90 95

Ser Thr Leu Thr Cys Met Gln His Tyr Glu Glu Val Gln Thr Ser Ala
 100 105 110

Ser Asp Leu Leu Asp Ser Gln Asp Ser Thr Gly Lys Pro Lys Cys His
 115 120 125

Gln Ser Arg Glu Leu Pro Arg Ile Pro Pro Glu Ser Ala Val Asp Thr
 130 135 140

Met Leu Thr Ala Arg Ser Val Asp Gly Asp Gln Gly Leu Gly Met Glu
 145 150 155 160

Gly Pro Tyr Glu Val Leu Lys Asp Ser Ser Ser Gln Glu Asn Met Val
 165 170 175

Glu Asp Cys Leu Tyr Glu Thr Val Lys Glu Ile Lys Glu Val Ala Ala
 180 185 190

Ala Ala His Leu Glu Lys Gly His Ser Gly Lys Ala Lys Ser Thr Ser
 195 200 205

Ala Ser Lys Glu Leu Pro Gly Pro Gln Thr Glu Gly Lys Ala Glu Phe
 210 215 220

Ala Glu Tyr Ala Ser Val Asp Arg Asn Lys Lys Cys Arg Gln Ser Val
 225 230 235 240

Asn Val Glu Ser Ile Leu Gly Asn Ser Cys Asp Pro Glu Glu Glu Ala
 245 250 255

Pro Pro Pro Val Pro Val Lys Leu Leu Asp Glu Asn Glu Asn Leu Gln
 260 265 270

Glu Lys Glu Gly Gly Glu Ala Glu Glu Ser Ala Thr Asp Thr Thr Ser
 275 280 285

Glu Thr Asn Lys Arg Phe Ser Ser Leu Ser Tyr Lys Ser Arg Glu Glu
 290 295 300

Asp Pro Thr Leu Thr Glu Glu Glu Ile Ser Ala Met Tyr Ser Ser Val
 305 310 315 320

Asn Lys Pro Gly Gln Leu Val Asn Lys Ser Gly Gln Ser Leu Thr Val
 325 330 335

Pro Glu Ser Thr Tyr Thr Ser Ile Gln Gly Asp Pro Gln Arg Ser Pro
 340 345 350

Ser Ser Cys Asn Asp Leu Tyr Ala Thr Val Lys Asp Phe Glu Lys Thr
 355 360 365

Pro Asn Ser Thr Leu Pro Pro Ala Gly Arg Pro Ser Glu Glu Pro Glu

370

375

380

Pro Asp Tyr Glu Ala Ile Gln Thr Leu Asn Arg Glu Glu Glu Lys Ala
 385 390 395 400

Thr Leu Gly Thr Asn Gly His His Gly Leu Val Pro Lys Glu Asn Asp
 405 410 415

Tyr Glu Ser Ile Ser Asp Leu Gln Gln Gly Arg Asp Ile Thr Arg Leu
 420 425 430

<210> 3005

<211> 501

<212> PRT

<213> Homo sapiens

<400> 3005

Met Ile Ile Ser His Phe Pro Lys Cys Val Ala Val Phe Ala Leu Leu
 1 5 10 15

Ala Leu Ser Val Gly Ala Leu Asp Thr Phe Ile Ala Ala Val Tyr Glu
 20 25 30

His Ala Val Ile Leu Pro Asn Arg Thr Glu Thr Pro Val Ser Lys Glu
 35 40 45

Glu Ala Leu Leu Leu Met Asn Lys Asn Ile Asp Val Leu Glu Lys Ala
 50 55 60

Val Lys Leu Ala Ala Lys Gln Gly Ala His Ile Ile Val Thr Pro Glu
 65 70 75 80

Asp Gly Ile Tyr Gly Trp Ile Phe Thr Arg Glu Ser Ile Tyr Pro Tyr
 85 90 95

Leu Glu Asp Ile Pro Asp Pro Gly Val Asn Trp Ile Pro Cys Arg Asp
 100 105 110

Pro Trp Arg Phe Gly Asn Thr Pro Val Gln Gln Arg Leu Ser Cys Leu
 115 120 125

Ala Lys Asp Asn Ser Ile Tyr Val Val Ala Asn Ile Gly Asp Lys Lys
 130 135 140

Pro Cys Asn Ala Ser Asp Ser Gln Cys Pro Pro Asp Gly Arg Tyr Gln
 145 150 155 160

Tyr Asn Thr Asp Val Val Phe Asp Ser Gln Gly Lys Leu Leu Ala Arg
 165 170 175

Tyr His Lys Tyr Asn Leu Phe Ala Pro Glu Ile Gln Phe Asp Phe Pro
 180 185 190

Lys Asp Ser Glu Leu Val Thr Phe Asp Thr Pro Phe Gly Lys Phe Gly
 195 200 205

Ile Phe Thr Cys Phe Asp Ile Phe Ser His Asp Pro Ala Ala Val Val
 210 215 220

Val Asp Glu Val Ser Ile Asp Ser Ile Leu Tyr Pro Thr Ala Trp Tyr
 225 230 235 240

Asn Thr Leu Pro Leu Leu Ser Ala Val Pro Phe His Ser Ala Trp Ala
 245 250 255

Lys Ala Met Gly Val Asn Leu Leu Ala Ala Asn Thr His Asn Thr Ser
 260 265 270

Met His Met Thr Gly Ser Gly Ile Tyr Ala Pro Glu Ala Val Lys Val
 275 280 285

Tyr His Tyr Asp Met Glu Thr Glu Ser Gly Gln Leu Leu Leu Ser Glu
 290 295 300

Leu Lys Ser Arg Pro Arg Arg Glu Pro Thr Tyr Pro Ala Ala Val Asp
 305 310 315 320

Trp His Ala Tyr Ala Ser Ser Val Lys Pro Phe Ser Ser Glu Gln Ser
 325 330 335

Asp Phe Leu Gly Met Ile Tyr Phe Asp Glu Phe Thr Phe Thr Lys Leu
 340 345 350

Lys Arg Asn Thr Gly Asn Tyr Thr Ala Cys Gln Lys Asp Leu Cys Cys
 355 360 365

His Leu Thr Tyr Lys Met Ser Glu Lys Arg Thr Asp Glu Ile Tyr Ala
 370 375 380

Leu Gly Ala Phe Asp Gly Leu His Thr Val Glu Gly Gln Tyr Tyr Leu
 385 390 395 400

Gln Ile Cys Ala Leu Leu Lys Cys Gln Thr Thr Asp Leu Glu Thr Cys
 405 410 415

Gly Glu Pro Val Gly Ser Ala Phe Thr Lys Phe Glu Asp Phe Ser Leu
 420 425 430

Ser Gly Thr Phe Gly Thr Arg Tyr Val Phe Pro Gln Ile Ile Leu Ser
 435 440 445

Gly Ser Gln Leu Ala Pro Glu Arg His Tyr Glu Ile Ser Arg Asp Gly
 450 455 460

Arg Leu Arg Ser Arg Ser Gly Ala Pro Leu Pro Val Leu Val Met Ala
 465 470 475 480

Leu Tyr Gly Arg Val Phe Glu Lys Asp Pro Pro Arg Leu Gly Gln Gly
 485 490 495

Ser Gly Lys Phe Gln
 500

<210> 3006

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3006

Met Trp Gly Leu Lys Val Leu Leu Leu Pro Val Val Ser Phe Ala Leu
 1 5 10 15

Tyr Pro Glu Glu Ile Leu Asp Thr His Trp Glu Leu Trp Lys Lys Thr
 20 25 30

His Arg Lys Gln Tyr Asn Asn Lys Val Asp Glu Ile Ser Arg Arg Leu
 35 40 45

Ile Trp Glu Lys Asn Leu Lys Tyr Ile Ser Ile His Asn Leu Glu Ala
 50 55 60

Ser Leu Gly Val His Thr Tyr Glu Leu Ala Met Asn His Leu Gly Asp
 65 70 75 80

Met Thr Ser Glu Glu Val Val Gln Lys Met Thr Gly Leu Lys Val Pro
 85 90 95

Leu Ser His Ser Arg Ser Asn Asp Thr Leu Tyr Ile Pro Glu Trp Glu
 100 105 110

Gly Arg Ala Pro Asp Ser Val Asp Tyr Arg Lys Lys Gly Tyr Val Thr
 115 120 125

Pro Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ser
 130 135 140

Val Gly Ala Leu Glu Gly Gln Leu Lys Lys Lys Thr Gly Lys Leu Leu
 145 150 155 160

Asn Leu Ser Pro Gln Asn Leu Val Asp Cys Val Ser Glu Asn Asp Gly
 165 170 175

Cys Gly Gly Gly Tyr Met Thr Asn Ala Phe Gln Tyr Val Gln Lys Asn
 180 185 190

Arg Gly Ile Asp Ser Glu Asp Ala Tyr Pro Tyr Val Gly Gln Glu Glu
 195 200 205

Ser Cys Met Tyr Asn Pro Thr Gly Lys Ala Ala Lys Cys Arg Gly Tyr
 210 215 220

Arg Glu Ile Pro Glu Gly Asn Glu Lys Ala Leu Lys Arg Ala Val Ala
 225 230 235 240

Arg Val Gly Pro Val Ser Val Ala Ile Asp Ala Ser Leu Thr Ser Phe
 245 250 255

Gln Phe Tyr Ser Lys Gly Val Tyr Tyr Asp Glu Ser Cys Asn Ser Asp
 260 265 270

Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly
 275 280 285

Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn
 290 295 300

Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile
 305 310 315 320

Ala Asn Leu Ala Ser Phe Pro Lys Met
 325

<210> 3007

<211> 1170

<212> PRT

<213> Homo sapiens

<400> 3007

Met Lys Asp Ser Cys Ile Thr Val Met Ala Met Ala Leu Leu Ser Gly
 1 5 10 15

Phe Phe Phe Phe Ala Pro Ala Ser Ser Tyr Asn Leu Asp Val Arg Gly
 20 25 30

Ala Arg Ser Phe Ser Pro Pro Arg Ala Gly Arg His Phe Gly Tyr Arg
 35 40 45

Val Leu Gln Val Gly Asn Gly Val Ile Val Gly Ala Pro Gly Glu Gly
 50 55 60

Asn Ser Thr Gly Ser Leu Tyr Gln Cys Gln Ser Gly Thr Gly His Cys
 65 70 75 80

Leu Pro Val Thr Leu Arg Gly Ser Asn Tyr Thr Ser Lys Tyr Leu Gly
 85 90 95

Met Thr Leu Ala Thr Asp Pro Thr Asp Gly Ser Ile Leu Ala Cys Asp
 100 105 110

Pro Gly Leu Ser Arg Thr Cys Asp Gln Asn Thr Tyr Leu Ser Gly Leu
 115 120 125

Cys Tyr Leu Phe Arg Gln Asn Leu Gln Gly Pro Met Leu Gln Gly Arg
 130 135 140

Pro Gly Phe Gln Glu Cys Ile Lys Gly Asn Val Asp Leu Val Phe Leu
 145 150 155 160

Phe Asp Gly Ser Met Ser Leu Gln Pro Asp Glu Phe Gln Lys Ile Leu
 165 170 175

Asp Phe Met Lys Asp Val Met Lys Lys Leu Ser Asn Thr Ser Tyr Gln
 180 185 190

Phe Ala Ala Val Gln Phe Ser Thr Ser Tyr Lys Thr Glu Phe Asp Phe
 195 200 205

Ser Asp Tyr Val Lys Trp Lys Asp Pro Asp Ala Leu Leu Lys His Val
 210 215 220

Lys His Met Leu Leu Leu Thr Asn Thr Phe Gly Ala Ile Asn Tyr Val

225 230 235 240

Ala Thr Glu Val Phe Arg Glu Glu Leu Gly Ala Arg Pro Asp Ala Thr
245 250 255

Lys Val Leu Ile Ile Ile Thr Asp Gly Glu Ala Thr Asp Ser Gly Asn
260 265 270

Ile Asp Ala Ala Lys Asp Ile Ile Arg Tyr Ile Ile Gly Ile Gly Lys
275 280 285

His Phe Gln Thr Lys Glu Ser Gln Glu Thr Leu His Lys Phe Ala Ser
290 295 300

Lys Pro Ala Ser Glu Phe Val Lys Ile Leu Asp Thr Phe Glu Lys Leu
305 310 315 320

Lys Asp Leu Phe Thr Glu Leu Gln Lys Lys Ile Tyr Val Ile Glu Gly
325 330 335

Thr Ser Lys Gln Asp Leu Thr Ser Phe Asn Met Glu Leu Ser Ser Ser
340 345 350

Gly Ile Ser Ala Asp Leu Ser Arg Gly His Ala Val Val Gly Ala Val
355 360 365

Gly Ala Lys Asp Trp Ala Gly Gly Phe Leu Asp Leu Lys Ala Asp Leu
370 375 380

Gln Asp Asp Thr Phe Ile Gly Asn Glu Pro Leu Thr Pro Glu Val Arg
385 390 395 400

Ala Gly Tyr Leu Gly Tyr Thr Val Thr Trp Leu Pro Ser Arg Gln Lys
405 410 415

Thr Ser Leu Leu Ala Ser Gly Ala Pro Arg Tyr Gln His Met Gly Arg
420 425 430

Val Leu Leu Phe Gln Glu Pro Gln Gly Gly Gly His Trp Ser Gln Val
435 440 445

Gln Thr Ile His Gly Thr Gln Ile Gly Ser Tyr Phe Gly Gly Glu Leu
450 455 460

Cys Gly Val Asp Val Asp Gln Asp Gly Glu Thr Glu Leu Leu Leu Ile
465 470 475 480

Gly Ala Pro Leu Phe Tyr Gly Glu Gln Arg Gly Gly Arg Val Phe Ile
485 490 495

Tyr Gln Arg Arg Gln Leu Gly Phe Glu Glu Val Ser Glu Leu Gln Gly
500 505 510

Asp Pro Gly Tyr Pro Leu Gly Arg Phe Gly Glu Ala Ile Thr Ala Leu
515 520 525

Thr Asp Ile Asn Gly Asp Gly Leu Val Asp Val Ala Val Gly Ala Pro
530 535 540

Leu Glu Glu Gln Gly Ala Val Tyr Ile Phe Asn Gly Arg His Gly Gly
545 550 555 560

Leu Ser Pro Gln Pro Ser Gln Arg Ile Glu Gly Thr Gln Val Leu Ser
565 570 575

Gly Ile Gln Trp Phe Gly Arg Ser Ile His Gly Val Lys Asp Leu Glu
580 585 590

Gly Asp Gly Leu Ala Asp Val Ala Val Gly Ala Glu Ser Gln Met Ile
595 600 605

Val Leu Ser Ser Arg Pro Val Val Asp Met Val Thr Leu Met Ser Phe
610 615 620

Ser Pro Ala Glu Ile Pro Val His Glu Val Glu Cys Ser Tyr Ser Thr
625 630 635 640

Ser Asn Lys Met Lys Glu Gly Val Asn Ile Thr Ile Cys Phe Gln Ile
645 650 655

Lys Ser Leu Tyr Pro Gln Phe Gln Gly Arg Leu Val Ala Asn Leu Thr
660 665 670

Tyr Thr Leu Gln Leu Asp Gly His Arg Thr Arg Arg Arg Gly Leu Phe
675 680 685

Pro Gly Gly Arg His Glu Leu Arg Arg Asn Ile Ala Val Thr Thr Ser
690 695 700

Met Ser Cys Thr Asp Phe Ser Phe His Phe Pro Val Cys Val Gln Asp
705 710 715 720

Leu Ile Ser Pro Ile Asn Val Ser Leu Asn Phe Ser Leu Trp Glu Glu
 725 730 735

Glu Gly Thr Pro Arg Asp Gln Arg Ala Gln Gly Lys Asp Ile Pro Pro
 740 745 750

Ile Leu Arg Pro Ser Leu His Ser Glu Thr Trp Glu Ile Pro Phe Glu
 755 760 765

Lys Asn Cys Gly Glu Asp Lys Lys Cys Glu Ala Asn Leu Arg Val Ser
 770 775 780

Phe Ser Pro Ala Arg Ser Arg Ala Leu Arg Leu Thr Ala Phe Ala Ser
 785 790 795 800

Leu Ser Val Glu Leu Ser Leu Ser Asn Leu Glu Glu Asp Ala Tyr Trp
 805 810 815

Val Gln Leu Asp Leu His Phe Pro Pro Gly Leu Ser Phe Arg Lys Val
 820 825 830

Glu Met Leu Lys Pro His Ser Gln Ile Pro Val Ser Cys Glu Glu Leu
 835 840 845

Pro Glu Glu Ser Arg Leu Leu Ser Arg Ala Leu Ser Cys Asn Val Ser
 850 855 860

Ser Pro Ile Phe Lys Ala Gly His Ser Val Ala Leu Gln Met Met Phe
 865 870 875 880

Asn Thr Leu Val Asn Ser Ser Trp Gly Asp Ser Val Glu Leu His Ala
 885 890 895

Asn Val Thr Cys Asn Asn Glu Asp Ser Asp Leu Leu Glu Asp Asn Ser
 900 905 910

Ala Thr Thr Ile Ile Pro Ile Leu Tyr Pro Ile Asn Ile Leu Ile Gln
 915 920 925

Asp Gln Glu Asp Ser Thr Leu Tyr Val Ser Phe Thr Pro Lys Gly Pro
 930 935 940

Lys Ile His Gln Val Lys His Met Tyr Gln Val Arg Ile Gln Pro Ser
 945 950 955 960

Ile His Asp His Asn Ile Pro Thr Leu Glu Ala Val Val Gly Val Pro
 965 970 975

Gln Pro Pro Ser Glu Gly Pro Ile Thr His Gln Trp Ser Val Gln Met
 980 985 990

Glu Pro Pro Val Pro Cys His Tyr Glu Asp Leu Glu Arg Leu Pro Asp
 995 1000 1005

Ala Ala Glu Pro Cys Leu Pro Gly Ala Leu Phe Arg Cys Pro Val
 1010 1015 1020

Val Phe Arg Gln Glu Ile Leu Val Gln Val Ile Gly Thr Leu Glu
 1025 1030 1035

Leu Val Gly Glu Ile Glu Ala Ser Ser Met Phe Ser Leu Cys Ser
 1040 1045 1050

Ser Leu Ser Ile Ser Phe Asn Ser Ser Lys His Phe His Leu Tyr
 1055 1060 1065

Gly Ser Asn Ala Ser Leu Ala Gln Val Val Met Lys Val Asp Val
 1070 1075 1080

Val Tyr Glu Lys Gln Met Leu Tyr Leu Tyr Val Leu Ser Gly Ile
 1085 1090 1095

Gly Gly Leu Leu Leu Leu Leu Leu Ile Phe Ile Val Leu Tyr Lys
 1100 1105 1110

Val Gly Phe Phe Lys Arg Asn Leu Lys Glu Lys Met Glu Ala Gly
 1115 1120 1125

Arg Gly Val Pro Asn Gly Ile Pro Ala Glu Asp Ser Glu Gln Leu
 1130 1135 1140

Ala Ser Gly Gln Glu Ala Gly Asp Pro Gly Cys Leu Lys Pro Leu
 1145 1150 1155

His Glu Lys Asp Ser Glu Ser Gly Gly Gly Lys Asp
 1160 1165 1170

<210> 3008
 <211> 502
 <212> PRT
 <213> Homo sapiens

<400> 3008

Met Ala Thr Asn Pro Gln Pro Gln Pro Pro Pro Pro Ala Pro Pro Pro
 1 5 10 15

Pro Pro Pro Gln Pro Gln Pro Gln Pro Pro Pro Pro Pro Pro Gly Pro
 20 25 30

Gly Ala Gly Pro Gly Ala Gly Gly Ala Gly Ala Gly Ala
 35 40 45

Gly Asp Pro Gln Leu Val Ala Met Ile Val Asn His Leu Lys Ser Gln
 50 55 60

Gly Leu Phe Asp Gln Phe Arg Arg Asp Cys Leu Ala Asp Val Asp Thr
 65 70 75 80

Lys Pro Ala Tyr Gln Asn Leu Arg Gln Arg Val Asp Asn Phe Val Ala
 85 90 95

Asn His Leu Ala Thr His Thr Trp Ser Pro His Leu Asn Lys Asn Gln
 100 105 110

Leu Arg Asn Asn Ile Arg Gln Gln Val Leu Lys Ser Gly Met Leu Glu
 115 120 125

Ser Gly Ile Asp Arg Ile Ile Ser Gln Val Val Asp Pro Lys Ile Asn
 130 135 140

His Thr Phe Arg Pro Gln Val Glu Lys Ala Val His Glu Phe Leu Ala
 145 150 155 160

Thr Leu Asn His Lys Glu Glu Gly Ser Gly Asn Thr Ala Pro Asp Asp
 165 170 175

Glu Lys Pro Asp Thr Ser Leu Ile Thr Gln Gly Val Pro Thr Pro Gly
 180 185 190

Pro Ser Ala Asn Val Ala Asn Asp Ala Met Ser Ile Leu Glu Thr Ile
 195 200 205

Thr Ser Leu Asn Gln Glu Ala Ser Ala Ala Arg Ala Ser Thr Glu Thr
 210 215 220

Ser Asn Ala Lys Thr Ser Glu Arg Ala Ser Lys Lys Leu Pro Ser Gln
 225 230 235 240

Pro Thr Thr Asp Thr Ser Thr Asp Lys Glu Arg Thr Ser Glu Asp Met
 245 250 255

Ala Asp Lys Glu Lys Ser Thr Ala Asp Ser Gly Gly Glu Gly Leu Glu
 260 265 270

Thr Ala Pro Lys Ser Glu Glu Phe Ser Asp Leu Pro Cys Pro Val Glu
 275 280 285

Glu Ile Lys Asn Tyr Thr Lys Glu His Asn Asn Leu Ile Leu Leu Asn
 290 295 300

Lys Asp Val Gln Gln Glu Ser Ser Glu Gln Lys Asn Lys Ser Thr Asp
 305 310 315 320

Lys Gly Glu Lys Lys Pro Asp Ser Asn Glu Lys Gly Glu Arg Lys Lys
 325 330 335

Glu Lys Lys Glu Lys Thr Glu Lys Lys Phe Asp His Ser Lys Lys Ser
 340 345 350

Glu Asp Thr Gln Lys Val Lys Asp Glu Lys Gln Ala Lys Glu Lys Glu
 355 360 365

Val Glu Ser Leu Lys Leu Pro Ser Glu Lys Asn Ser Asn Lys Ala Lys
 370 375 380

Thr Val Glu Gly Thr Lys Glu Asp Phe Ser Leu Ile Asp Ser Asp Val
 385 390 395 400

Asp Gly Leu Thr Asp Ile Thr Val Ser Ser Val His Thr Ser Asp Leu
 405 410 415

Ser Ser Phe Glu Glu Asp Thr Glu Glu Glu Val Val Thr Ser Asp Ser
 420 425 430

Met Glu Glu Gly Glu Ile Thr Ser Asp Asp Glu Glu Lys Asn Lys Gln
 435 440 445

Asn Lys Thr Lys Thr Gln Thr Ser Asp Ser Ser Glu Gly Lys Thr Lys
 450 455 460

Ser Val Arg His Ala Tyr Val His Lys Pro Tyr Leu Tyr Ser Lys Tyr
 465 470 475 480

Tyr Ser Asp Ser Asp Asp Glu Leu Thr Val Glu Gln Arg Arg Gln Ser
 485 490 495

Ile Gly Ile Leu Trp Phe
 500

<210> 3009
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 3009

Met Lys Arg Phe Leu Phe Leu Leu Leu Thr Ile Ser Leu Leu Val Met
 1 5 10 15

Val Gln Ile Gln Thr Gly Leu Ser Gly Gln Asn Asp Thr Ser Gln Thr
 20 25 30

Ser Ser Pro Ser Ala Ser Ser Ser Met Ser Gly Gly Ile Phe Leu Phe
 35 40 45

Phe Val Ala Asn Ala Ile Ile His Leu Phe Cys Phe Ser
 50 55 60

<210> 3010
 <211> 352
 <212> PRT
 <213> Homo sapiens

<400> 3010

Met Glu Gly Ile Ser Ile Tyr Thr Ser Asp Asn Tyr Thr Glu Glu Met
 1 5 10 15

Gly Ser Gly Asp Tyr Asp Ser Met Lys Glu Pro Cys Phe Arg Glu Glu
 20 25 30

Asn Ala Asn Phe Asn Lys Ile Phe Leu Pro Thr Ile Tyr Ser Ile Ile
 35 40 45

Phe Leu Thr Gly Ile Val Gly Asn Gly Leu Val Ile Leu Val Met Gly
 50 55 60

Tyr Gln Lys Lys Leu Arg Ser Met Thr Asp Lys Tyr Arg Leu His Leu
 65 70 75 80

Ser Val Ala Asp Leu Leu Phe Val Ile Thr Leu Pro Phe Trp Ala Val
 85 90 95

Asp Ala Val Ala Asn Trp Tyr Phe Gly Asn Phe Leu Cys Lys Ala Val
 100 105 110

His Val Ile Tyr Thr Val Asn Leu Tyr Ser Ser Val Leu Ile Leu Ala
 115 120 125

Phe Ile Ser Leu Asp Arg Tyr Leu Ala Ile Val His Ala Thr Asn Ser
 130 135 140

Gln Arg Pro Arg Lys Leu Leu Ala Glu Lys Val Val Tyr Val Gly Val
 145 150 155 160

Trp Ile Pro Ala Leu Leu Leu Thr Ile Pro Asp Phe Ile Phe Ala Asn
 165 170 175

Val Ser Glu Ala Asp Asp Arg Tyr Ile Cys Asp Arg Phe Tyr Pro Asn
 180 185 190

Asp Leu Trp Val Val Val Phe Gln Phe Gln His Ile Met Val Gly Leu
 195 200 205

Ile Leu Pro Gly Ile Val Ile Leu Ser Cys Tyr Cys Ile Ile Ile Ser
 210 215 220

Lys Leu Ser His Ser Lys Gly His Gln Lys Arg Lys Ala Leu Lys Thr
 225 230 235 240

Thr Val Ile Leu Ile Leu Ala Phe Phe Ala Cys Trp Leu Pro Tyr Tyr
 245 250 255

Ile Gly Ile Ser Ile Asp Ser Phe Ile Leu Leu Glu Ile Ile Lys Gln
 260 265 270

Gly Cys Glu Phe Glu Asn Thr Val His Lys Trp Ile Ser Ile Thr Glu
 275 280 285

Ala Leu Ala Phe Phe His Cys Cys Leu Asn Pro Ile Leu Tyr Ala Phe
 290 295 300

Leu Gly Ala Lys Phe Lys Thr Ser Ala Gln His Ala Leu Thr Ser Val
 305 310 315 320

Ser Arg Gly Ser Ser Leu Lys Ile Leu Ser Lys Gly Lys Arg Gly Gly
 325 330 335

His Ser Ser Val Ser Thr Glu Ser Glu Ser Ser Ser Phe His Ser Ser
 340 345 350

<210> 3011
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3011

Met Ala Pro Leu Lys Met Leu Ala Leu Val Thr Leu Leu Leu Gly Ala
 1 5 10 15

Ser Leu Gln His Ile His Ala Ala Arg Gly Thr Asn Val Gly Arg Glu
 20 25 30

Cys Cys Leu Glu Tyr Phe Lys Gly Ala Ile Pro Leu Arg Lys Leu Lys
 35 40 45

Thr Trp Tyr Gln Thr Ser Glu Asp Cys Ser Arg Asp Ala Ile Val Phe
 50 55 60

Val Thr Val Gln Gly Arg Ala Ile Cys Ser Asp Pro Asn Asn Lys Arg
 65 70 75 80

Val Lys Asn Ala Val Lys Tyr Leu Gln Ser Leu Glu Arg Ser
 85 90

<210> 3012
 <211> 748
 <212> PRT
 <213> Homo sapiens

<400> 3012

Met Ser Gln Trp Asn Gln Val Gln Gln Leu Glu Ile Lys Phe Leu Glu
 1 5 10 15

Gln Val Asp Gln Phe Tyr Asp Asp Asn Phe Pro Met Glu Ile Arg His
 20 25 30

Leu Leu Ala Gln Trp Ile Glu Asn Gln Asp Trp Glu Ala Ala Ser Asn
 35 40 45

Asn Glu Thr Met Ala Thr Ile Leu Leu Gln Asn Leu Leu Ile Gln Leu
 50 55 60

Asp Glu Gln Leu Gly Arg Val Ser Lys Glu Lys Asn Leu Leu Leu Ile
 65 70 75 80

His Asn Leu Lys Arg Ile Arg Lys Val Leu Gln Gly Lys Phe His Gly
 85 90 95

Asn Pro Met His Val Ala Val Val Ile Ser Asn Cys Leu Arg Glu Glu
 100 105 110

Arg Arg Ile Leu Ala Ala Ala Asn Met Pro Val Gln Gly Pro Leu Glu
 115 120 125

Lys Ser Leu Gln Ser Ser Ser Val Ser Glu Arg Gln Arg Asn Val Glu
 130 135 140

His Lys Val Ala Ala Ile Lys Asn Ser Val Gln Met Thr Glu Gln Asp
 145 150 155 160

Thr Lys Tyr Leu Glu Asp Leu Gln Asp Glu Phe Asp Tyr Arg Tyr Lys
 165 170 175

Thr Ile Gln Thr Met Asp Gln Ser Asp Lys Asn Ser Ala Met Val Asn
 180 185 190

Gln Glu Val Leu Thr Leu Gln Glu Met Leu Asn Ser Leu Asp Phe Lys
 195 200 205

Arg Lys Glu Ala Leu Ser Lys Met Thr Gln Ile Ile His Glu Thr Asp
 210 215 220

Leu Leu Met Asn Thr Met Leu Ile Glu Glu Leu Gln Asp Trp Lys Arg
 225 230 235 240

Arg Gln Gln Ile Ala Cys Ile Gly Gly Pro Leu His Asn Gly Leu Asp
 245 250 255

Gln Leu Gln Asn Cys Phe Thr Leu Leu Ala Glu Ser Leu Phe Gln Leu
 260 265 270

Arg Arg Gln Leu Glu Lys Leu Glu Glu Gln Ser Thr Lys Met Thr Tyr
 275 280 285

Glu Gly Asp Pro Ile Pro Met Gln Arg Thr His Met Leu Glu Arg Val
 290 295 300

Thr Phe Leu Ile Tyr Asn Leu Phe Lys Asn Ser Phe Val Val Glu Arg
 305 310 315 320

Gln Pro Cys Met Pro Thr His Pro Gln Arg Pro Leu Val Leu Lys Thr
 325 330 335

Leu Ile Gln Phe Thr Val Lys Leu Arg Leu Leu Ile Lys Leu Pro Glu
 340 345 350

Leu Asn Tyr Gln Val Lys Val Lys Ala Ser Ile Asp Lys Asn Val Ser
 355 360 365

Thr Leu Ser Asn Arg Arg Phe Val Leu Cys Gly Thr Asn Val Lys Ala
 370 375 380

Met Ser Ile Glu Glu Ser Ser Asn Gly Ser Leu Ser Val Glu Phe Arg
 385 390 395 400

His Leu Gln Pro Lys Glu Met Lys Ser Ser Ala Gly Gly Lys Gly Asn
 405 410 415

Glu Gly Cys His Met Val Thr Glu Glu Leu His Ser Ile Thr Phe Glu
 420 425 430

Thr Gln Ile Cys Leu Tyr Gly Leu Thr Ile Asp Leu Glu Thr Ser Ser
 435 440 445

Leu Pro Val Val Met Ile Ser Asn Val Ser Gln Leu Pro Asn Ala Trp
 450 455 460

Ala Ser Ile Ile Trp Tyr Asn Val Ser Thr Asn Asp Ser Gln Asn Leu
 465 470 475 480

Val Phe Phe Asn Asn Pro Pro Pro Ala Thr Leu Ser Gln Leu Leu Glu
 485 490 495

Val Met Ser Trp Gln Phe Ser Ser Tyr Val Gly Arg Gly Leu Asn Ser
 500 505 510

Asp Gln Leu His Met Leu Ala Glu Lys Leu Thr Val Gln Ser Ser Tyr
 515 520 525

Ser Asp Gly His Leu Thr Trp Ala Lys Phe Cys Lys Glu His Leu Pro
 530 535 540

Gly Lys Ser Phe Thr Phe Trp Thr Trp Leu Glu Ala Ile Leu Asp Leu
 545 550 555 560

Ile Lys Lys His Ile Leu Pro Leu Trp Ile Asp Gly Tyr Val Met Gly

565

570

575

Phe Val Ser Lys Glu Lys Glu Arg Leu Leu Leu Lys Asp Lys Met Pro
 580 585 590

Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser His Leu Gly Gly Ile Thr
 595 600 605

Phe Thr Trp Val Asp His Ser Glu Ser Gly Glu Val Arg Phe His Ser
 610 615 620

Val Glu Pro Tyr Asn Lys Gly Arg Leu Ser Ala Leu Pro Phe Ala Asp
 625 630 635 640

Ile Leu Arg Asp Tyr Lys Val Ile Met Ala Glu Asn Ile Pro Glu Asn
 645 650 655

Pro Leu Lys Tyr Leu Tyr Pro Asp Ile Pro Lys Asp Lys Ala Phe Gly
 660 665 670

Lys His Tyr Ser Ser Gln Pro Cys Glu Val Ser Arg Pro Thr Glu Arg
 675 680 685

Gly Asp Lys Gly Tyr Val Pro Ser Val Phe Ile Pro Ile Ser Thr Ile
 690 695 700

Arg Ser Asp Ser Thr Glu Pro His Ser Pro Ser Asp Leu Leu Pro Met
 705 710 715 720

Ser Pro Ser Val Tyr Ala Val Leu Arg Glu Asn Leu Ser Pro Thr Thr
 725 730 735

Ile Glu Thr Ala Met Lys Ser Pro Tyr Ser Ala Glu
 740 745

<210> 3013

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3013

Met Lys Leu Cys Val Thr Val Leu Ser Leu Leu Met Leu Val Ala Ala
 1 5 10 15

Phe Cys Ser Pro Ala Leu Ser Ala Pro Met Gly Ser Asp Pro Pro Thr
 20 25 30

Ala Cys Cys Phe Ser Tyr Thr Ala Arg Lys Leu Pro Arg Asn Phe Val
 35 40 45

Val Asp Tyr Tyr Glu Thr Ser Ser Leu Cys Ser Gln Pro Ala Val Val
 50 55 60

Phe Gln Thr Lys Arg Ser Lys Gln Val Cys Ala Asp Pro Ser Glu Ser
 65 70 75 80

Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu Asn
 85 90

<210> 3014

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3014

Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Leu Gly Leu Gln
 1 5 10 15

Gly Cys Leu Ala Ala Val Phe Val Thr Gln Glu Glu Ala His Gly Val
 20 25 30

Leu His Arg Arg Arg Arg Ala Asn Ala Phe Leu Glu Glu Leu Arg Pro
 35 40 45

Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu Gln Cys Ser Phe Glu Glu
 50 55 60

Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile
 65 70 75 80

Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly
 85 90 95

Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro
 100 105 110

Ala Phe Glu Gly Arg Asn Cys Glu Thr His Lys Asp Asp Gln Leu Ile
 115 120 125

Cys Val Asn Glu Asn Gly Gly Cys Glu Gln Tyr Cys Ser Asp His Thr
 130 135 140

Gly Thr Lys Arg Ser Cys Arg Cys His Glu Gly Tyr Ser Leu Leu Ala

145 150 155 160
 Asp Gly Val Ser Cys Thr Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile
 165 170 175
 Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys Pro Gln Gly Arg Ile Val
 180 185 190
 Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp Gln Val Leu Leu
 195 200 205
 Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile
 210 215 220
 Trp Val Val Ser Ala Ala His Cys Phe Asp Lys Ile Lys Asn Trp Arg
 225 230 235 240
 Asn Leu Ile Ala Val Leu Gly Glu His Asp Leu Ser Glu His Asp Gly
 245 250 255
 Asp Glu Gln Ser Arg Arg Val Ala Gln Val Ile Ile Pro Ser Thr Tyr
 260 265 270
 Val Pro Gly Thr Thr Asn His Asp Ile Ala Leu Leu Arg Leu His Gln
 275 280 285
 Pro Val Val Leu Thr Asp His Val Val Pro Leu Cys Leu Pro Glu Arg
 290 295 300
 Thr Phe Ser Glu Arg Thr Leu Ala Phe Val Arg Phe Ser Leu Val Ser
 305 310 315 320
 Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala Thr Ala Leu Glu Leu Met
 325 330 335
 Val Leu Asn Val Pro Arg Leu Met Thr Gln Asp Cys Leu Gln Gln Ser
 340 345 350
 Arg Lys Val Gly Asp Ser Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala
 355 360 365
 Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly
 370 375 380
 Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val
 385 390 395 400

Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val Tyr Thr
 405 410 415

Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln Lys Leu Met Arg Ser Glu
 420 425 430

Pro Arg Pro Gly Val Leu Leu Arg Ala Pro Phe Pro
 435 440

<210> 3015

<211> 769

<212> PRT

<213> Homo sapiens

<400> 3015

Met Leu Gly Leu Arg Pro Pro Leu Leu Ala Leu Val Gly Leu Leu Ser
 1 5 10 15

Leu Gly Cys Val Leu Ser Gln Glu Cys Thr Lys Phe Lys Val Ser Ser
 20 25 30

Cys Arg Glu Cys Ile Glu Ser Gly Pro Gly Cys Thr Trp Cys Gln Lys
 35 40 45

Leu Asn Phe Thr Gly Pro Gly Asp Pro Asp Ser Ile Arg Cys Asp Thr
 50 55 60

Arg Pro Gln Leu Leu Met Arg Gly Cys Ala Ala Asp Asp Ile Met Asp
 65 70 75 80

Pro Thr Ser Leu Ala Glu Thr Gln Glu Asp His Asn Gly Gly Gln Lys
 85 90 95

Gln Leu Ser Pro Gln Lys Val Thr Leu Tyr Leu Arg Pro Gly Gln Ala
 100 105 110

Ala Ala Phe Asn Val Thr Phe Arg Arg Ala Lys Gly Tyr Pro Ile Asp
 115 120 125

Leu Tyr Tyr Leu Met Asp Leu Ser Tyr Ser Met Leu Asp Asp Leu Arg
 130 135 140

Asn Val Lys Lys Leu Gly Gly Asp Leu Leu Arg Ala Leu Asn Glu Ile
 145 150 155 160

Thr Glu Ser Gly Arg Ile Gly Phe Gly Ser Phe Val Asp Lys Thr Val
 165 170 175

Leu Pro Phe Val Asn Thr His Pro Asp Lys Leu Arg Asn Pro Cys Pro
 180 185 190

Asn Lys Glu Lys Glu Cys Gln Pro Pro Phe Ala Phe Arg His Val Leu
 195 200 205

Lys Leu Thr Asn Asn Ser Asn Gln Phe Gln Thr Glu Val Gly Lys Gln
 210 215 220

Leu Ile Ser Gly Asn Leu Asp Ala Pro Glu Gly Gly Leu Asp Ala Met
 225 230 235 240

Met Gln Val Ala Ala Cys Pro Glu Glu Ile Gly Trp Arg Asn Val Thr
 245 250 255

Arg Leu Leu Val Phe Ala Thr Asp Asp Gly Phe His Phe Ala Gly Asp
 260 265 270

Gly Lys Leu Gly Ala Ile Leu Thr Pro Asn Asp Gly Arg Cys His Leu
 275 280 285

Glu Asp Asn Leu Tyr Lys Arg Ser Asn Glu Phe Asp Tyr Pro Ser Val
 290 295 300

Gly Gln Leu Ala His Lys Leu Ala Glu Asn Asn Ile Gln Pro Ile Phe
 305 310 315 320

Ala Val Thr Ser Arg Met Val Lys Thr Tyr Glu Lys Leu Thr Glu Ile
 325 330 335

Ile Pro Lys Ser Ala Val Gly Glu Leu Ser Glu Asp Ser Ser Asn Val
 340 345 350

Val His Leu Ile Lys Asn Ala Tyr Asn Lys Leu Ser Ser Arg Val Phe
 355 360 365

Leu Asp His Asn Ala Leu Pro Asp Thr Leu Lys Val Thr Tyr Asp Ser
 370 375 380

Phe Cys Ser Asn Gly Val Thr His Arg Asn Gln Pro Arg Gly Asp Cys
 385 390 395 400

Asp Gly Val Gln Ile Asn Val Pro Ile Thr Phe Gln Val Lys Val Thr

405

410

415

Ala Thr Glu Cys Ile Gln Glu Gln Ser Phe Val Ile Arg Ala Leu Gly
 420 425 430

Phe Thr Asp Ile Val Thr Val Gln Val Leu Pro Gln Cys Glu Cys Arg
 435 440 445

Cys Arg Asp Gln Ser Arg Asp Arg Ser Leu Cys His Gly Lys Gly Phe
 450 455 460

Leu Glu Cys Gly Ile Cys Arg Cys Asp Thr Gly Tyr Ile Gly Lys Asn
 465 470 475 480

Cys Glu Cys Gln Thr Gln Gly Arg Ser Ser Gln Glu Leu Glu Gly Ser
 485 490 495

Cys Arg Lys Asp Asn Asn Ser Ile Ile Cys Ser Gly Leu Gly Asp Cys
 500 505 510

Val Cys Gly Gln Cys Leu Cys His Thr Ser Asp Val Pro Gly Lys Leu
 515 520 525

Ile Tyr Gly Gln Tyr Cys Glu Cys Asp Thr Ile Asn Cys Glu Arg Tyr
 530 535 540

Asn Gly Gln Val Cys Gly Gly Pro Gly Arg Gly Leu Cys Phe Cys Gly
 545 550 555 560

Lys Cys Arg Cys His Pro Gly Phe Glu Gly Ser Ala Cys Gln Cys Glu
 565 570 575

Arg Thr Thr Glu Gly Cys Leu Asn Pro Arg Arg Val Glu Cys Ser Gly
 580 585 590

Arg Gly Arg Cys Arg Cys Asn Val Cys Glu Cys His Ser Gly Tyr Gln
 595 600 605

Leu Pro Leu Cys Gln Glu Cys Pro Gly Cys Pro Ser Pro Cys Gly Lys
 610 615 620

Tyr Ile Ser Cys Ala Glu Cys Leu Lys Phe Glu Lys Gly Pro Phe Gly
 625 630 635 640

Lys Asn Cys Ser Ala Ala Cys Pro Gly Leu Gln Leu Ser Asn Asn Pro
 645 650 655

Val Lys Gly Arg Thr Cys Lys Glu Arg Asp Ser Glu Gly Cys Trp Val
660 665 670

Ala Tyr Thr Leu Glu Gln Gln Asp Gly Met Asp Arg Tyr Leu Ile Tyr
675 680 685

Val Asp Glu Ser Arg Glu Cys Val Ala Gly Pro Asn Ile Ala Ala Ile
690 695 700

Val Gly Gly Thr Val Ala Gly Ile Val Leu Ile Gly Ile Leu Leu Leu
705 710 715 720

Val Ile Trp Lys Ala Leu Ile His Leu Ser Asp Leu Arg Glu Tyr Arg
725 730 735

Arg Phe Glu Lys Glu Lys Leu Lys Ser Gln Trp Asn Asn Asp Asn Pro
740 745 750

Leu Phe Lys Ser Ala Thr Thr Thr Val Met Asn Pro Lys Phe Ala Glu
755 760 765

Ser

<210> 3016

<211> 50

<212> DNA

<213> Homo sapiens

<400> 3016

gggaggaaca ctgcactctt aagcttccgc cgtctcaacc cctcacagga 50

<210> 3017

<211> 50

<212> DNA

<213> Homo sapiens

<400> 3017

aggagtcttt taccgggtgt gctttgcccgc agtcatccaa aataaattca 50

<210> 3018

<211> 50

<212> DNA

<213> Homo sapiens

<400> 3018

cacctgattc cccctcttgc ccacaggact ctgctgttgt tttcattctg 50

<210> 3019
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3019
attatatttg tccctatcag aatcctcgaa tccttagcag ccagtcctcg 50

<210> 3020
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3020
gtcccttagg ggaggagag ttgtcctctt tgcccacagt ctaccctcag 50

<210> 3021
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3021
cttgggccag actgtcaggg ttcaaggagg gcatcaggag cagacggaga 50

<210> 3022
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3022
ctcttcaagg ggtctacatg gcaactgtga ggaggggaga ttcagtgtgg 50

<210> 3023
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3023
taagcataaa acctgacacg ttaaaatccc tgccctttgg tgagcccact 50

<210> 3024
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3024
tgctgggtatt ctactgccca catttttggga aacctgtatt acaccttaaa 50

<210> 3025
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3025
cagtcactgg gtctatatta aacagcaacc agagcaacaa atgggcaaca 50

<210> 3026
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3026
tctagcccag cattgatcta gaagcagagg aatcccagcg ccttttaaaa 50

<210> 3027
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3027
tgggcaagac atgattaatg aatcagaatc ctgtttcatt ggtgacttgg 50

<210> 3028
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3028
tgcagattcc tagtagcatg ccttaacctac agcaactatgt gcatttgtgt 50

<210> 3029
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3029
ggtctgagag tctgtgaaga tggcccagtc ttctatcccc cacctaaaaa 50

<210> 3030
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3030
cttgaccaa cccacagcct gtctcttctc ttgttttagtt acttacggca 50

<210> 3031
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3031
ccactgtcac tgtttctctg ctgttgcaaa tacatggata acacatttga 50

<210> 3032
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3032
tgcagccact attgttagtc tcttgattca taatgactta agcacacttg 50

<210> 3033
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3033
cctgatggag agaagaaggc atatgttcga ctggctcctg attacgatgc 50

<210> 3034
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3034
gccgaattgt ctttgggtgct ttccacttgt gttttaaaat aaggattttt 50

<210> 3035
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3035
ctggaggacc tgttgatgct agttcagagt atcaccaaga gctggagagg 50

<210> 3036
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3036
accatccaat cggacaagct ttcagaacct tattgaagga ttgaagcac 50

<210> 3037
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3037
agaaatgttc agtaatgaaa aaatatatcc aatcagagcc atcccgaana 50

<210> 3038
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3038
agcggactca ggctccagct gtggctacaa catagggttt ttatacaaga 50

<210> 3039
<211> 50
<212> DNA

<213> Homo sapiens

<400> 3039
accagactga caaatgtgta tcggatgctt ttgttcaggg ctgtgatcgg 50

<210> 3040
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3040
ccactgtcac tgtttctctg ctgttgcaaa tacatggata acacatttga 50

<210> 3041
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3041
aagtgaacaa aataagcaac taaatgagac ctaataattg gccttcgatt 50

<210> 3042
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3042
tctgttgata gctggagaac tttagtcca agtactacat tgtgaaagca 50

<210> 3043
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3043
gacctcatct ccaagatgga gaagatctga cctccacgga gccgctgtcc 50

<210> 3044
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3044
ctgaccgcca ctctcacatt tgggctcttc gctggccttg gtggagctgg 50

<210> 3045
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3045
atacagcccc ggcagaaaaa gcctaaagtc agatgagaga ccagtacata 50

<210> 3046

<211> 50
<212> DNA
<213> Homo sapiens

<400> 3046
aacagaagtc aagagaacat agaccaactt gctgcatgag taagggtgct 50

<210> 3047
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3047
agaggactat agtgggaagtg aaagcattct gtgtttactc ttgcatataa 50

<210> 3048
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3048
caggtcaacc cccaccggac ctacaacccg cagtcccaca tcattctcagg 50

<210> 3049
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3049
ccttccagaa gctacgaaaa agggagctgt ttaaatttaa taaattctctg 50

<210> 3050
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3050
ccaatggata ttctgtatt actaggagg catttacagt cctctaattgt 50

<210> 3051
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3051
atctgacatt attgtaacta ccgtgtgatc agtaagattc ctgtaagaaa 50

<210> 3052
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3052
tccaatgcag tccattctt tatggcctat agtctcactc ccaactacc 50

<210> 3053
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3053
tcctaggtag gggttaaatcc ccagtaaaat tgccatattg cacatgtcctt 50

<210> 3054
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3054
gggcattcca ccgaaattct tggggaaatt tagtagcctt cattttagca 50

<210> 3055
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3055
aaagggtttt atccactgtc atttcaattg gataacattt tgtcaagttt 50

<210> 3056
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3056
aattcctgaa cgttggatc accttctgtc agtccatcat ctccaccctg 50

<210> 3057
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3057
ggcaggaggt tctcactggt gtgaagggtg tagacgttgt gtaatgtggt 50

<210> 3058
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3058
gtgggtaagg ggctcaagct gtgatgctgc tggttttatc tctagtgaaa 50

<210> 3059
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3059

agacaaagag agcataaata tagctctact catgggtacc ataccagtgt 50

<210> 3060
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3060
cttcaggccc aagttcaacg ggttaaagag gtccgctccc aaattattct 50

<210> 3061
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3061
aacaagccat gtttgccta gtccaggatt gcctcacttg agacttgcta 50

<210> 3062
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3062
tcttctctggg aatgtgatgt gtttttctact ggttctaatt ctgtcttctc 50

<210> 3063
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3063
tgatctgact ggaaaacaat cctgtatccc ctcccaaaga atcatgggct 50

<210> 3064
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3064
aacaagccat gtttgccta gtccaggatt gcctcacttg agacttgcta 50

<210> 3065
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3065
acagcatgag aaactgtag tacgcatacc tcagttcaaa cctttaggga 50

<210> 3066
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3066
tctctgactt cttattacca aggacactct atctgttgcc tcttactctt 50

<210> 3067
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3067
gagagcttcc tccccgcctt cagtttctga tggatctagc catgttgaaa 50

<210> 3068
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3068
ggagggaatgg ctgtgccccg cccctccact taagcgacct gagtctccag 50

<210> 3069
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3069
ggaaatgttg ctgtggggga ttcattgtaa ctctccttgt gaactgctca 50

<210> 3070
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3070
aggtgggctg gacttctacc tgcctcaag ggtgtgtata ttgtataggg 50

<210> 3071
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3071
cagacgctcc agtgctgccg aggttagtgt gtttattaga cctgaaatga 50

<210> 3072
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3072
ccttgggctg agtttgctgg tctgaagat tacagttttg gttagagaga 50

<210> 3073
<211> 50

<212> DNA
<213> Homo sapiens

<400> 3073
tctcggttta cctttttgct gttgtgggtc ttgtttcttg ctggtttgct 50

<210> 3074
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3074
tgtgctaagc ctgatgaaat gtgctccttc aatctccatg aaaccatcgt 50

<210> 3075
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3075
ttcctgtctc catgttggtg tcaagattgc catttgcttc ctgagtttca 50

<210> 3076
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3076
ataacagact ccagctcctg gtccaccgg catgtcagtc agcactctgg 50

<210> 3077
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3077
gggagccatc cctctctacc aagggtggcaa tgatggaggg aacttgcatg 50

<210> 3078
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3078
ttgacctccc atttttacta ttgccaata cctttttcta ggaatgtgct 50

<210> 3079
<211> 50
<212> DNA
<213> Homo sapiens

<400> 3079
ggaggcagcc agggcttacc tgtacactga cttgagacca gttgaataaa 50

<210> 3080
 <211> 50
 <212> DNA
 <213> Homo sapiens

 <400> 3080
 tagtttagagt ccaagacatg gttcctcccc ctttgtctgt acatcctggc 50

 <210> 3081
 <211> 50
 <212> DNA
 <213> Homo sapiens

 <400> 3081
 tttgcatccc gagttttgta ttccaagaaa atcaaagggg gccaatattgt 50

 <210> 3082
 <211> 63
 <212> DNA
 <213> Homo sapiens

 <400> 3082
 ggccagtga ttgtaatacg actcactata gggaggcggt tttttttttt tttttttttt 60
 ttt 63

 <210> 3083
 <211> 463
 <212> DNA
 <213> Homo sapiens

 <400> 3083
 ttggccttgac tcaggattta aaaactggaa cggatgaagg gacagcagtc ggttggacga 60
 gcatccccca aagttcaciaa tggggccgag gactttgatt gcacattggt gttttttta 120
 agtcattcca aatatgagat gcattgttac aggaagtccc ttgccatcct aaaagcacc 180
 cacttctctc taaggagaa gggccagtcc tctcccaagt ccacacaggg gagggatagc 240
 attgctttcg tgtaaattat gtaatgcaaa atttttttaa tcttcgcctt aatctttttt 300
 attttgtttt attttgaatg atgagccttc gtgccccccc ttcccccttt tttcccccaa 360
 cttgagatgt atgaaggctt ttggtctccc tgggagtggt tggaggcagc cgggcttacc 420
 tgtacactga cttgagacca gttgaataaa agtgcacacc tta 463

 <210> 3084
 <211> 491
 <212> DNA
 <213> Homo sapiens

 <400> 3084
 gaagagtacc agaaaagtct gctagagcag taccatctgg gtctggatca aaacgcaga 60
 aaatatgtgg ttggagagct cattttggaat ttgccgatt tcatgactga acagtcaccg 120

```

acgagagtgc tggggaataa aaaggggatc ttcactcggc agagacaacc aaaagtgc 180
gcgttccttt tgcgagagag atactggaag attgccaatg aaaccaggta tccccactca 240
gtagccaagt cacaatgttt ggaaaacagc ccgtttactt gagcaagact gataccacct 300
gcgtgtccct tctccccga gtcagggcga cttccacagc agcagaacaa gtgcctcctg 360
gactgttcac ggcagaccag aacgtttctg gcctggggtt tgtgggtcatc tattetagca 420
gggaacacta aaggttgaaa taaaagattt tctattatgg aaataaagag ttggcatgaa 480
agtcgctact g 491

```

```

<210> 3085
<211> 20
<212> DNA
<213> Homo sapiens

```

```

<400> 3085
cacaaatgtgg ccgaggactt 20

```

```

<210> 3086
<211> 20
<212> DNA
<213> Homo sapiens

```

```

<400> 3086
tgtggccgag gactttgatt 20

```

```

<210> 3087
<211> 20
<212> DNA
<213> Homo sapiens

```

```

<400> 3087
tggcttttag gatggcaagg 20

```

```

<210> 3088
<211> 20
<212> DNA
<213> Homo sapiens

```

```

<400> 3088
gggggcttag ttgcttcct 20

```

```

<210> 3089
<211> 20
<212> DNA
<213> Homo sapiens

```

```

<400> 3089
aagtgcagcg ttccttttgc 20

```

<210> 3090
<211> 20
<212> DNA
<213> Homo sapiens

<400> 3090
agcggttcctt ttgcgagaga 20

<210> 3091
<211> 20
<212> DNA
<213> Homo sapiens

<400> 3091
cgggctgttt tccaaacatt 20

<210> 3092
<211> 20
<212> DNA
<213> Homo sapiens

<400> 3092
gaagggacac gcaggtggta 20

<210> 3093
<211> 20
<212> DNA
<213> Homo sapiens

<400> 3093
taccacctgc gtgtcccttc 20

<210> 3094
<211> 21
<212> DNA
<213> Homo sapiens

<400> 3094
gaggcacttg ttctgtgct g 21

<210> 3095
<211> 20
<212> DNA
<213> Homo sapiens

<400> 3095
tgtggccgag gactttgatt 20

<210> 3096
<211> 327
<212> DNA
<213> Homo sapiens

<400> 3096
ggggactctg gaggccctct tgtgtgtaac aaggtggccc agggcattgt ctccctatgga 60

cgaaacaatg gcattgcctcc acgagcctgc accaaagtct caagctttgt acaactggata 120
 aagaaaacca tgaacgcta ctaactacag gaagcaaact aagccccgc tgtaatgaaa 180
 cactctctct ggagccaagt ccagatttac actgggagag gtgccagcaa ctgaataaat 240
 acctctccca gtgtaaatct ggagccaagt ccagatttac actgggagag gtgccagcaa 300
 ctgaataaat acctcttagc tgagtgg 327

<210> 3097
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 3097
 acgagcctgc accaaagtct 20

<210> 3098
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 3098
 aaacaatggc atgcctccac 20

<210> 3099
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 3099
 tcattacagc gggggcttag 20

<210> 3100
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 3100
 gggggcttag ttgtctctc 20

<210> 3101
 <211> 5252
 <212> DNA
 <213> Homo sapiens

<400> 3101
 ctctctccca gaactgtct ctgctgcaag gcaccgggcc ctttcgtct gcagaactgc 60
 acttgcaaga ccattatcaa ctccaatcc cagctcagaa agggagcctc tgcgactcat 120
 tcctgcctcc ccaggactga ctgcattgca cagatgatgg atatttacgt atgtttgaaa 180
 cgaccatcct ggatgggtgga caataaaaga atgaggactg cttcaaatct ccagtggctg 240

ttatcaacat ttattcttct atactaatg aatcaagtaa atagccagaa aaagggggct	300
cctcatgatt tgaagtgtgt aactaacaat ttgcaagtgt ggaactgttc ttggaagca	360
ccctctggaa caggccgttg tactgattat gaagtttgca ttgaaaacag gtcccgttct	420
tgttatcagt tggagaaaac cagtattaaa attccagctc tttcacatgg tgattatgaa	480
ataacaataa attctctaca tgattttgga agttctacaa gtaaatcac actaaatgaa	540
caaacggtt ccttaattcc agatactcca gagatcttga atttgtctgc tgatttctca	600
acctctacat tatacctaaa gtggaacgac aggggttcag tttttccaca ccgtcaaat	660
gttatctggg aaattaaagt tctacgtaaa gagagtatgg agctcgtaaa attagtacc	720
cacaacacaa ctctgaatgg caagataca ctctcatcact ggagttgggc ctcatatg	780
cccttggaa gtgccattca ttttgggaa attagatgct acattgacaa tcttcatttt	840
tctggtctcg aagagtggag tgactggagc cctgtgaaga acatttcttg gatactgat	900
tctcagacta aggttttttc tcaagataaa gtgatacttg taggtctcaga cataacattt	960
tgttggtgta gtcaagaaaa agtggtatca gcaactgatt gccatacaaa ctgccccttg	1020
atccatcttg atggggaaaa tgttgcaatc aagattcgta atatttctgt ttctgcaagt	1080
agtggaacaa atgtagtttt tacaaccgaa gataacatat ttggaacgtt tatttttgct	1140
ggatatccac cagatactcc tcaacaactg aattgtgaga cacatgattt aaagaaatt	1200
atatgtagtt ggaatccagg aagggtgaca gcgttggtgg gccacgtgc tacaagctac	1260
actttagttg aaagtttttc aggaaaaatat gttagactta aaagagctga agcaccata	1320
aacgaaagct atcaattatt atttcaaag ctcccaaatc aagaaatata taattttact	1380
ttgaatgctc acaatccgtg ggttcgatca caatcaacaa ttttagttaa tataactgaa	1440
aaagtttacc ccatactcc tacttcattc aaagtgaagg atattaattc aacagctgtt	1500
aaactttctt ggcatttacc aggcaacttt gcaaagatta attttttatg tgaaattgaa	1560
attaagaaat ctaattcagt acaagagcag cggaatgtca caatcaaagg agtagaaaa	1620
tcaagttatc ttgtgtctct ggacaagtta aatccataca ctctatatc ttttcggatt	1680
cgttgttcta ctgaaacttt ctggaaatgg agcaaatgga gcaataaaaa acaacattta	1740
acaacagaag ccagtccttc aaaggggcct gatacttgga gagagtggag ttctgatgga	1800
aaaaatttaa taactattg gaagccttta ccattaatg aagctaattg aaaaatactt	1860
tcctacaatg tatcgtgttc atcagatgag gaaacacagt cctttctga aatccctgat	1920
cctcagcaca aagcagagat acgacttgat aagaatgact acatcatcag cgtagtggct	1980
aaaaattctg tgggctcacc accaccttc aaaaatgcga gtatggaat tccaaatgat	2040

gattctcaaaa tagaacaagt tgttgggatg ggaaagggga ttctctctcac ctggcattac	2100
gacccaaca tgacttgcga ctacgtcatt aagtgggtga actcgtctcg gtcggaacca	2160
tgccttatgg actggagaaa agttccctca aacagcactg aaactgtaat agaattctgat	2220
gagtttcgac caggtataag atataatfff ttctctgatg gatgcagaaa tcaaggatat	2280
caattattac gctccatgat tggatatata gaagaattgg ctcccattgt tgcaccaaat	2340
tttactgttg aggatacttc tgcagattcg atattagtaa aatgggaaga cattctctgtg	2400
gaagaactta gaggtctttt aagaggatat ttgttttact ttggaaaagg agaaagagac	2460
acatctaaga tgagggtttt agaatacagg cgttctgaca taaaagttaa gaatattact	2520
gacatatccc agaagacact gagaattgct gatcttcaag gtaaaacaag ttaccacctg	2580
gtcttcgag cctatacaga tgggtggagt ggcccggaga agagtatgta tgtggtgaca	2640
aaggaaaatt ctgtgggatt aattattgcc attctcatcc cagtggcagt ggctgtcatt	2700
gttgaggatg tgacaagat cctttgctat cggaaacgag aatggattaa agaaaccttc	2760
tacctgata ttccaaatcc agaaaactgt aaagcattac agtttcaaaa gagtgtctgt	2820
gagggaagca gtgctcttaa aacattggaa atgaatcctt gtaccccaaa taatgttgag	2880
gtttctggaaa ctgcatcagc atttcctaaa atagaagata cagaaataat ttccccagta	2940
gctgagcgc ctgaagatcg ctctgatgca gagcctgaaa accatgtggt tgtgtcctat	3000
tgccaccca tcattgagga agaaatacca aaccagccg cagatgaagc tggagggact	3060
gcacaggta ttacattga tgttcagtcg atgtatcagc ctcaagcaaa accagaagaa	3120
gaacaagaaa atgacctgt agggagggca ggctataagc cacagatgca cctccccatt	3180
aattctactg tggagatat agctgcagaa gaggacttag ataaaactgc gggttacaga	3240
cctcaggcca atgtaaatac atggaattta gtgtctccag actctcctag atccatagac	3300
agcaacagt agattgtctc atttggaagt ccatgctcca ttaattcccg acaatttttg	3360
attcctccta aagatgaaga ctctcctaaa tctaatggag gaggttggtc ctttacaac	3420
ttttttcaga acaaaccaaa cgattaacag tgtcaccgtg tcaacttcagt cagccatctc	3480
aataagctct tactgctagt gttgctacat cagcactggg cattcttgga gggatcctgt	3540
gaagtattgt taggagggtga acttcactac atgttaagtt aactgaaaag ttcatgtgct	3600
tttaattgat tctaaaagcc aaagtatatg gactcagaat cctcaatcca caaaactcaa	3660
gattggggag cctttgtgat caagccaaag aattctcatg tactctacct tcaagaagca	3720
tttcaaggct aatacctact tgtacgtaca tgtaaaacaa atccgcgcgc aactgttttc	3780
tgttctgttg ttgtgggttt tctcatatgt atacttggtg gaattgtaag tggatttgca	3840
ggccagggag aaaatgtcca agtaacagg gaagtttatt tgccctgacgt ttactccttt	3900

```

ctagatgaaa accaagcaca gattttaaaa cttctaagat tattctcctc tatccacagc 3960
attcacaaaa attaatataa tttttaatgt agtgacacg atttagtggt ttgtttgata 4020
aagtagtctt atttctgtgc ctactgtata atgggttatca aacagttgtc tcaggggtac 4080
aaactttgaa aacaagtgtg acactgacca gcccaaatca taatcatggt ttcttgctgt 4140
gataggtttt gcttgccttt tcattatatt tttagcttta tgettgtctc cattatttca 4200
gttggttgcc ctaatattta aaatttacac ttctaagact agagaccac atttttttaa 4260
aatcatttta ttttgtgata cagtgcacgc ttatatagag caaattcaat attattcata 4320
agcatgtaat tccagtgcac tactatgtga gatgactact aagcaatata tagcagcggt 4380
agttccatat agttctgatt ggatttcggt cctcctgagg agaccatgcc gttgagcttg 4440
gctaccagg cagtgtgat ctttgacacc ttctgggtgga tgttcctccc actcatgagt 4500
cttttcatca tgccacatta tctgatccag tcctcacatt tttaaatata aaactaaaga 4560
gagaatgctt cttacaggaa cagttacca agggctgttt cttagtaact gtcataaact 4620
gatctggatc catgggcata cctgtgttcg aggtgcagca attgcttggt gagctgtgca 4680
gaattgattg ccttcagcac agcatcctct gccaccctt gtttctcata agogatgtct 4740
ggagtgattg tgggtcttgg aaaagcagaa ggaaaaacta aaaagtgtat cttgtatttt 4800
ccctgcctc aggttgccta tgtattttac ctttctatat ttaaggcaaa agtacttgaa 4860
aattttaagt gtccgaataa gatatgtctt ttttgtttgt ttttttgggt tgggtgtttg 4920
ttttttatca tctgagattc tgtaatgtat ttgcaataa tggatcaatt aatttttttt 4980
gaagctcata ttgtatcttt ttaaaaacca tgttgtggaa aaaagccaga gtgacaagtg 5040
acaaaatcta tttaggaact ctgtgtatga atcctgattt taactgctag gattcagcta 5100
aatttctgag ctttatgatc tgtggaattt tggaatgaaa tcgaattcat tttgtacata 5160
catagtatat taaaactata taatagttca tagaaatgtt cagtaatgaa aaaatatatc 5220
caatcagagc catcccgaaa aaaaaaaaaa aa 5252

```

<210> 3102

<211> 5252

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3967)..(3988)

<223> n is a, c, g, t or u

<400> 3102

ctctctccca gaacgtgtct ctgtgcgaag gcaccgggcc ctttcgtctc gcagaactgc 60

acttgcaaga ccattatcaa ctccaatcc cagctcagaa agggagcctc tgcgactcat	120
tcacgcacct ccaggactga ctgcattgca cagatgatgg atatttacgt atgtttgaaa	180
cgaccatcct ggatgggtgga caataaaaga atgaggactg cttcaaatct ccagtggctg	240
ttatcaacat ttattctctc atatctaata aatcaagtaa atagccagaa aaagggggct	300
cctcatgatt tgaagtgtgt aactaacaat ttgcaagtgt ggaactgttc ttggaaagca	360
ccctctggaa caggcogtgg tactgattat gaagtttgca ttgaaaacag gtcccggtct	420
tgttatcagt tggagaaaa cagtattaaa attccagctc tttcacatgg tgattatgaa	480
ataacaataa attctctaca tgattttgga agttctacaa gtaaatccac actaaatgaa	540
caaaacgttt ccttaattcc agatactcca gagatcttga atttgtctgc tgattttctca	600
acctctacat tatacctaaa gtggaacgac aggggttcag tttttccaca ccgctcaaat	660
gttatctggg aaattaaagt tctacgtaaa gagagtatgg agctcgtaaa attagtgacc	720
cacaacacaa ctctgaatgg caagataca cttcatcact ggagtgggc ctcagatatg	780
cccttggaat gtgccattca ttttgtggaa attagatgct acattgacaa tcttcatttt	840
tctggctctg aagagtggag tgactggagc cctgtgaaga acatttcttg gatacctgat	900
tctcagacta aggtttttcc tcaagataaa gtgatacttg taggctcaga cataacattt	960
tgttgtgtga gtcaagaaaa agtgttatca gcaactgatt gccatacaaa ctgccccttg	1020
atccatcttg atggggaaaa tgttgcaatc aagattcgtg atatttctgt ttctgcaagt	1080
agtggaacaa atgtagtttt tacaaccgaa gataacatat ttggaacogt tatttttgc	1140
ggatattccc cagatactcc tcaacaactg aattgtgaga cacatgattt aaagaaatt	1200
atatgtagtt ggaatccagg aagggtgaca gcgttggtgg gccacgtgc tacaagctac	1260
acttttagtg aaagtttttc aggaaaatat gttagactta aaagagctga agcacctaca	1320
aacgaaagct atcaattatt atttcaaatg cttccaaatc aagaaatata taattttact	1380
ttgaatgctc acaatccgct gggtcgatca caatcaacaa ttttagttaa tataactgaa	1440
aaagtttato ccatactcc tacttcattc aaagtgaagg atattaattc aacagctgtt	1500
aaactttctt ggcatttacc aggcaacttt gcaagatta attttttatg tgaattgaa	1560
attaagaaat ctaattcagt acaagagcag cggaatgtca caatcaaagg agtagaaaat	1620
tcaagttatc ttgtgtctct ggacaagtta aatccataca ctctatatac ttttcggatt	1680
cgttgttcta ctgaaacttt ctggaaatgg agcaaatgga gcaataaaaa acaacattta	1740
acaacagaag ccagtccttc aaaggggcct gatacttgga gagagtggag ttctgatgga	1800
aaaaatttaa taatctattg gaagccttta ccattaatat aagctaattg aaaaatactt	1860

tcctacaatg tatcgtgttc atcagatgag gaaacacagt ccccttctga aatccctgat 1920
 cctcagcaca aagcagagat acgacttgat aagaatgact acatcatcag cgtagtggct 1980
 aaaaattctg tgggctcadc accaccttcc aaaatagcga gtatggaaat tccaaatgat 2040
 gatctcaaaa tagaacaagt tgttgggatg ggaaggggga ttctcctcac ctggcattac 2100
 gacccaaca tgacttgcca ctacgtcatt aagtgggtga actcgtctcg gtcggaacca 2160
 tgccttatgg actggagaaa agttccctca aacagcactg aaactgtaat agaattctgat 2220
 gagtctgcac cagggtataag atataatctt ttctgtatg gatgcagaaa tcaaggatat 2280
 caattattac gctccatgat tggatatata gaagaattgg ctcccatgtg tgcaccaaatt 2340
 ttactgttg aggatacttc tgcagattcg atattagtaa aatgggaaga cattcctgtg 2400
 gaagaactta gaggcctttt aaggagatat ttgttttact ttggaaaagg gaaagagac 2460
 acatctaaga tgagggtttt agaatcagggt cgttctgaca taaaagttaa gaattact 2520
 gacatatccc agaagacact gagaattgct gatcttcaag gtaaaacaag ttaccacctg 2580
 gtcttcgag cctatacaga tgggtggagtg ggcccgaga agagtatgta tgtgtgaca 2640
 aaggaaaatt ctgtgggatt aattattgcc attctcatcc cagtggcagt ggctgtcatt 2700
 gttggagtgg tgacaagtat cctttgctat cggaaacgag aatggattaa agaaaccttc 2760
 tacctgata ttccaaatcc agaaaactgt aaagcattac agtttcaaaa gagtgtctgt 2820
 gagggaaagca gtgctcttaa aacattggaa atgaatcctt gtaccccaaa taatgttgag 2880
 gttctggaaa ctcgatcagc atttcctaaa atagaagata cagaataat ttccccagta 2940
 gctgagcgtc ctgaagatcg ctctgatgca gagcctgaaa accatgtggt tgtgtcctat 3000
 tgtccacca tcattgagga agaaatacca aaccagccg cagatgaagc tggagggact 3060
 gcacaggtta ttacattga tgttcagtcg atgtatcagc ctcaagcaaa accagaagaa 3120
 gaacaagaaa atgacctgtg aggaggggca ggcataagc cacagatgca cctccccatt 3180
 aattctactg tggaagatat agctgcagaa gaggacttag ataaaactgc gggttacaga 3240
 cctcaggcca atgtaatac atggaattta gtgtctccag actctcctag atccatagac 3300
 agcaacagtg agattgtctc atttggaaagt ccatgctcca ttaattcccg acaatttttg 3360
 attcctccta aagatgaaga ctctcctaaa tctaattggag gaggtgtgtc ctttacaac 3420
 ttttttcaga acaaaccaaa cgattaacag tgtcaccgtg tcaattcagt cagccatctc 3480
 aataagctct tactgctagt gttgtacat cagcactggg cattcttgga gggatcctgt 3540
 gaagtattgt taggaggtga acttcactac atgttaagtt aactgaaaag ttcattgtgt 3600
 tttaatgtag tctaaaagcc aaagtatagt gactcagaat cctcaatcca caaaactcaa 3660
 gattgggagc tctttgtgat caagccaaag aattctcatg tactctacct tcaagaagca 3720

```

tttcaaggct aatacctact tgtacgtaca tgtaaaacaa atccccgcgc aactgttttc 3780
tgttctgttg tttgtggttt tctcatatgt atacttggtg gaattgtaag tggatttgca 3840
ggccagggag aaaatgtcca agtaacaggt gaagtttatt tgcctgacgt ttactccttt 3900
ctagatgaaa accaagcaca gattttaaaa cttctaagat tattctcttc tatccacagc 3960
attcacnnnn nnnnnnnnnn nnnnnnnngt agtgacagcg atttagtggt ttgtttgata 4020
aagtatgctt atttctgtgc ctactgtata atggttatca aacagttgtc tcaggggtac 4080
aaactttgaa aacaagtgtg acactgacca gcccaaatca taatcatggt ttctgtgctgt 4140
gatagggttt gcttgccctt tcattatttt ttagctttta tgcctgcttc cattatttca 4200
gttggttgcc ctaatattta aaatttacac ttctaagact agagaccac attttttaaa 4260
aatcatttta ttttgtgata cagtgcagc tttatatgag caaattcaat attattcata 4320
agcatgtaat tccagtgact tactatgtga gatgactact aagcaatata tagcagcggt 4380
agttccatat agttctgatt ggatttcggt cctcctgagg agaccatgcc gttgagcttg 4440
gctaccagg cagtggtagt ctttgacacc ttctgggtga tgttcctccc actcatgagt 4500
cttttcatca tggcacatta tctgatccag tcttcacatt tttaaatata aaactaaaga 4560
gagaatgctt cttacaggaa cagttacca agggctggtt cttagtaact gtcataaaact 4620
gatctggatc catgggcata cctgtgttcg aggtgcagca attgcttggt gagctgtgca 4680
gaattgatgt ccttcagcac agcatcctct gccaccctt gttctcata agcgatgtct 4740
ggagtgatgt tggttcttgg aaaagcagaa ggaaaaacta aaaagtgtat cttgtatttt 4800
ccctgccttc aggttcctta tgtattttac cttttcatat ttaaggcaaa agtacttgaa 4860
aattttaagt gtccgaataa gatatgtctt ttttgttgt tttttttggt tgggtgtttg 4920
ttttttatca tctgagattc tgtaatgtat ttgcaaatata tggatcaatt aatttttttt 4980
gaagtcata ttgtatcttt ttaaaaacca tgttgtggaa aaaagccaga gtgacaagtg 5040
acaaaatcta tttaggaact ctgtgtatga atcctgattt taactgctag gattcagcta 5100
aatttctgag ctttatgac tgtggaattt tggaatgaaa tcgaattcat tttgtacata 5160
catagtatat taaaactata taatagttca tagaaatgtt cagtaatgaa aaaatatatc 5220
caatcagagc catcccgaaa aaaaaaaaaa aa 5252

```

<210> 3103

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3103

```

tttttttttt ttttcttaaa tagcatttat tttctctcaa aaagcctatt atgtactaac 60

```

```

aagtgttcct ctaaattaga aaggcatcac tactaaaatt ttatacatat tttttatata 120
agagaaggaa tattgggtta caatctgaat ttctctttat gatttctctt aaagtataga 180
acagctatta aaatgactaa tattgctaaa atgaaggcta ctaaatttcc ccaagaattt 240
cgggtgaatg cccaaaaatg gtgttaagat atgcagaagg gcccatattca agcaaagcaa 300
tctctccacc ccttcataaa agatttaagc taaaaaaaaa aaaaaaagaa gaaaatccaa 360
cagctgaaga cattgggcta ttataaaatc ttctccagcag cccccagaca gcctcacatg 420
ggggctgtaa acagctaact aaaatatctt tgagactctt atgtccacac ccaatgacac 480
aaggagagct gtaaccacag tgaaactaga ctttgctttc ctttagcaag tatgtgccta 540
tgatagtaaa ctggagtaaa tgtaacagta ataaacaaa ttttttttaa aataaaaaat 600
tatacctttt tctccaacaa acggtaaaga ccacgtgaag acatccataa aattaggcaa 660
ccagtaaaga tgtggagaac cagtaaaactg tcgaaattca tcacattatt ttcatacttt 720
aatacagcag ctttaattat tggagaacat caaagtaatt aggtgccgaa aaacattggt 780
attaatgaag ggaacccctg acgtttgacc ttttctgtac catctatagc cctggacttg 840
a 841

```

```

<210> 3104
<211> 841
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (94)..(121)
<223> n is a, c, g, t or u

```

```

<220>
<221> misc_feature
<222> (569)..(604)
<223> n is a, c, g, t or u

```

```

<400> 3104
tttttttttt ttttcttaaa tagcatttat tttctctcaa aaagcctatt atgtactaac 60
aagtgttcct ctaaattaga aaggcatcac tacnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
ngagaaggaa tattgggtta caatctgaat ttctctttat gatttctctt aaagtataga 180
acagctatta aaatgactaa tattgctaaa atgaaggcta ctaaatttcc ccaagaattt 240
cgggtgaatg cccaaaaatg gtgttaagat atgcagaagg gcccatattca agcaaagcaa 300
tctctccacc ccttcataaa agatttaagc taaaaaaaaa aaaaaaagaa gaaaatccaa 360
cagctgaaga cattgggcta ttataaaatc ttctccagcag cccccagaca gcctcacatg 420

```

```

ggggctgtaa acagctaact aaaatatctt tgagactctt atgtccacac ccaactgacac 480
aaggagagct gtaaccacag tgaaactaga ctttgcttcc ctttagcaag tatgtgccta 540
tgatagtaaa ctggagtaaa tgtaacagnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nnnncccttt tctccaacaa acggtaaaga ccacgtgaag acatccataa aattaggcaa 660
ccagtaaaga tgtggagaac cagtaaaactg tcgaaattca tcacattatt ttcatacttt 720
aatacagcag ctttaattat tggagaacat caaagtaatt aggtgccgaa aaacattggt 780
attaatgaag ggaacccctg acgtttgacc ttttctgtac catctatagc cctggacttg 840
a 841

```

```

<210> 3105
<211> 63
<212> DNA
<213> Homo sapiens

```

```

<400> 3105
ggccagtgaa ttgtaatacg actcactata gggaggcggt tttttttttt tttttttttt 60
ttt 63

```

```

<210> 3106
<211> 609
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (303)..(304)
<223> n is a, c, g, t or u

```

```

<400> 3106
acatcagtggt ctacatgtga gtcagacct gggctgtgtg ctgtctgtct tcccaatate 60
catgaccttg actgatgcag gtgtctaggg atacaggtea cacagccgtc catccccgtc 120
ctgtcggagc ccagagcacg gaagcctggc cctccgagga gacagaaggg agtgtcggac 180
accatgacga gagcttggca gaataataa cttctttaa caattttacg gcatgaagaa 240
atctggacca gtttattaaa tgggatttct gccacaaacc ttggaagaat cacatcatct 300
tanncccaag tgaaaactgt gttgcgtaac aaagaacatg actgcgctcc acacatacat 360
cattgcccg cgaggcgga cacaagtcaa cgacggaaca ctgagacag gcctacaact 420
gtgcacgggt cagaagcaag ttaagccat acttgctgca gtgagactac atttctgtct 480
atagaagata cctgacttga tctgttttc agctccagtt cccagatgtg cgtgttgtgg 540
tccccaagta tcaccttcca atttctggga gcagtgtctt ggccggatcc ttgccgcgcg 600
gataaaaac 609

```

<210> 3107
 <211> 50
 <212> DNA
 <213> Homo sapiens

 <400> 3107
 gaaattggaa ggtgatactt ggggaccaca acacgcacat ctgggaactg 50

 <210> 3108
 <211> 738
 <212> DNA
 <213> Homo sapiens

 <400> 3108
 aaagcagaat tgagagtttg ttcttacaca caagtttaat gccaccttc tctgtctgcc 60
 atggaccaac aagcaatata tgctgagtta aacttaccca cagactcagg ccagaaaagt 120
 tcttcacctt catctcttcc tcgggatgtc tgcagggtt caccttgga tcaatttgcc 180
 ctgaaaacta gctgtgctgg gattattctc ctgtctctgg ttgtactgg gttgagtgtt 240
 tcagtgcacat ccttaataca gaaatcatca atagaaaaat gcagtgtgga cattcaacag 300
 agcaggaata aaacaacaga gagaccgggt ctcttaaat gcccaatata ttggcagcaa 360
 ctccgagaga aatgcttgtt attttctcac actgtcaacc ctggaataa cagtctagct 420
 gattgttcca ccaaagaatc cagcctgctg cttattcag ataggatga attgatacac 480
 acacagaacc tgatacgtga caaagcaatt ctgttttggg ttggattaaa tttttcatta 540
 tcagaaaaga actggaagtg gataaacggc tcttttttaa attctaata cttagaaatt 600
 agagggtgatg ctaagaaaa cagctgtatt tccatctcac agacatctgt gtattctgag 660
 tactgtagta cagaaatcag atggatctgc caaaaagaac taacacctgt gagaaataaa 720
 gtgtatcctg actcttga 738

 <210> 3109
 <211> 3809
 <212> DNA
 <213> Homo sapiens

 <400> 3109
 gccgctgta tgcgtattcc cgtagacca agcaccagcc gccgcttcac acctccctcc 60
 ccggccttcc cctgcggcgg cggcgggcgg aagatggcgg agaacagcgg cgcgctgagc 120
 gcgcaggcgg ccgtggggcc cggaggcgcc gcccgcccg aggtgcgctc gatggtggac 180
 gtgctggcgg accacgcagg cgagctcgtg cgcaccgaca gccccactt cctctgctcc 240
 gtgctgccct cgcactggcg ctgcaacaag acgctgcccg tcgccttcaa ggtggtggca 300
 ttgggggacg tgccggatgg tacggtggtg actgtgatgg caggcaatga cgagaactac 360

tcgctgagc tgcgcaatgc ctggccgctc atgaagaacc aggtggccag gttcaacgac	420
cttcgcttcg tgggcccagc tgggagaggg aagagtttca ccctgacccat cactgtgttc	480
accaaccccc cccaagtggc gacctaccac cgagccatca aggtgaccgt ggacggaccc	540
cgggagccca gacggcaccg gcagaagctg gaggaccaga ccaagccgtt ccctgaccgc	600
tttggggacc tggaacggct gcgcatgcgg gtgacaccga gcacaccag cccccagggc	660
tcaactcagca ccacaagcca cttcagcagc cagcccccaga ccccaatcca aggcacctcg	720
gaactgaacc cattctccga cccccgccag tttagaccgt ccttccccac gctgccaaac	780
ctcaccggaga gccgcttccc agaccccagg atgcattatc cgggggccc atgcagctgcc	840
ttcccttaca gcgccagccc ctggggcagc agcatcagca gcctcagcgt ggccggcatg	900
ccggccacca gccgcttcca ccatacctac ctcccgcac cctaccggg gggcccgag	960
aaccagagcg ggcccttcca ggccaaccg tccccctacc acctctacta cgggacatcc	1020
tctggctcct accagttctc catggtggcc ggcagcagca gtggggcgga ccgctcacct	1080
accgcacatc tggcctcttg caccagcagc gctgcctctg tcgccgcgg caacctcatg	1140
aacccagccc tgggcccgca gactgatggc gtggaggccg acggcagcca cagcaactca	1200
cccacggccc tgagcagccc agggccgcat gatgaggccg tgtggcgccc ctactgaccg	1260
ccctggtgga ctccctccc tggaggcggg gaccctaaca accttcaaga ccagtgtggt	1320
gccggctccg aggcctccgg cgggaaatggg acctgcgctc cagggtggtc tcgggtcccag	1380
ggtggtccca gctggtggga gcctctggct gcactctgtc agccacatcc ttgtacagag	1440
gcataggtta cccccccc cccggcccgg gatactgccc cggcccaga tcctggccgt	1500
ctcatcccat acttctgtgg ggaatcagcc tcctgccacc cccccgaag gacctactg	1560
ttccagcta tgcccagtc tgcatgggac ccatgtctcc tgggacagag gccatctctc	1620
ttccagagag aggcagcatt gggccacagg ataagcctca ggccctggga aacctccga	1680
cccctgcacc ttcgttgagg cccctgcac cctgggtcc agccccctct gcatttacac	1740
agatttgagt cagaactgga aagtgtcccc cccccccc accctcgagc ggggttcccc	1800
tcattgtaca gatggggcag gaccagcac gctgctggca gagatggttt gagaacacat	1860
ccaagccagt ccccccagcc cagcttcccc tccgttcta actgttggt tccccccagc	1920
cgacgggtcc caggcccaga gaagatgagt ctatggcacc aggttcttaa accaggaaag	1980
cacctacaga ccggctctc catgcacttt accagctcaa cgcacccact ctctgttctc	2040
ttggcagggc gggggagggg ggataggagg tcccccttc cctaggtggt ctcataatc	2100
catttgtgga gagaacagga gggccagata gataggtcct agcagaaggc attgaggtga	2160

```

gggatcattt tgggtcagac atcaatgtcc ctgtccccc tgggtccagc caagctgtgc 2220
cccatccccc aagcctcctg ggaggatcca gccaaatctt gcgactcctg gcacacacct 2280
gtctgttaacc tgttttgtgc tctgaaagca aatagtcctg agcaaaaaaa aaaaaaaaaa 2340
acaaaaaac aaaaaaaaa caaaacagtt tttaaaactg attttagaaa aagaagctta 2400
atctaactgtt ttcaaacaca aggtctctta caggtatagt tccgtgatta tgatagctct 2460
gtgattataa gcaacatccc cgtccctctt cccccccg gacccccagc tgcctcctga 2520
gggtgtgggg ttattagggt ctcaatactt tctcaagggg ctacactccc catcaggcag 2580
catcccacca gctgcacca caggctcccc tgggaggacg agggaaacgc tgatgagacg 2640
ctgggcattc ctctctgtg gctctaggac atctgtccag gaggtctggc ggaggtgggc 2700
aggatgtgag aggtggggag tactggctgt gcgtggcagg acagaagcac tgtaaggggc 2760
tctccagcgc agctcagctg cactgcgttc cgaggtgaag tcttgccctt gaattttgca 2820
aaatgggaaa gtgggcctt gccaaaggcc aggtgcatg gattctcaca tcagagttct 2880
ctggccctag aaaggcttag aaaaggcgta agggaaacta taaaggctag cagcatgcgg 2940
tattttaact ttctgcctcg gcctctgtgg atgcagaaat ctgcctaca aaatgctctt 3000
cattggttgt ctctgtgaga gactgtccc caccacacct gtcacaacgg ccagaacct 3060
acaccagaga cacactggca ggttaggcag tcttctgtgt gatcctattc cattccctcc 3120
tgctgcgggt tctcttgccc tgctctcact ggaaaaacag tctccatctc ctcaaaatag 3180
ttgctgactc cctgcaccca aggggcctct ccatgccttc ttaggaagca gctatgaatc 3240
cattgtcctt gtagtttctt cctcctgtgt ctctggttat agctggctcc aggtcagcgt 3300
gggaggcacc tttgggttcc cagtgcctag cactttgtag tctcatccca gattactaac 3360
ccttctgat cctggagagg cagggatagt aaataaattg ctcttcttac cccatccccc 3420
atccccctgc aaaaagtgcg ggcagccgta ctgagctctg aaggcccaaa gtgggtacag 3480
acagcctggg ctggtaaaag taggtcctta ttacaaggc tgcgttaaag ttgtactagg 3540
caaacacact gatgtaggaa gcacaggaa aggaagacgt tttgatatag tgttactgtg 3600
agcctgtcag tagtgggtac caatcttttg tgacatattg tcatgctgag gtgtgacacc 3660
tgctgcactc atctgatgta aaaccatccc agagctggcg agaggatgga gctgggtgga 3720
aactgctttg cactatcggt tgcttggtgt ttgtttttaa cgcacaactt gcttgtagag 3780
taaactgtct tctgtactat ttaactgta 3809

```

```

<210> 3110
<211> 1161
<212> DNA
<213> Homo sapiens

```

<400> 3110
 caaagagcta catgccacat gctgttctcc agcctgctgt gtgtatttgt ggccttcagc 60
 tactctggat caagtgtggc ccagaaggtt actcaagccc agtcatcagt atccatgccca 120
 gtgaggaaag cagtcacctt gaactgcctg tatgaacaaa gttgggtggc atattatatt 180
 ttttggtaca agcaacttcc cagcaaagag atgattttcc ttattcgcca ggggtctgat 240
 gaacagaatg caaaaagtgg tcgctattct gtcaacttca agaaagcagc gaaatccgtc 300
 gccttaacca ttccagcctt acagctagaa gattcagcaa agtacttttg tgcctctggg 360
 acgggggtga ggggactcca ggacaccgat aaactcatct ttggaaaagg aaccctgtgt 420
 actgtggaac caagaagtca gcctcatacc aaaccatccg tttttgtcat gaaaatgga 480
 acaaatgtcg cttgtctggt gaaggaattc taccccaagg atataagaat aaatctcgtg 540
 tcatccaaga agataacaga gtttgatcct gctattgtca tctctcccag tgggaagtac 600
 aatgctgtca agcttggtta atatgaagat tcaaattcag tgacatgttc agttcaacac 660
 gacaataaaa ctgtgactc cactgacttt gaagtgaaga cagattctac agatcacgta 720
 aaaccaaagg aaactgaaaa cacaagcaa ccttcaaaga gctgccataa acccaaagcc 780
 atagttcata ccgagaaggt gaacatgatg tccctcacag tgcttgggct acgaatgctg 840
 tttgcaaga ctgttcctt caattttctc ttgactgcca agttattttt cttgtaaggc 900
 tgactggcat gaggaagcta cactcctgaa gaaaccaaag gcttcaaaaa atgcatctcc 960
 ttggcttctg acttctttgt gattcaagtt gacctgtcat agccttggtta aaatggctgc 1020
 tagccaaacc actttttctt caaagacaac aaacccagct catcctccag cttgatggga 1080
 agacaaaagt cctggggaag ggggggttat gtccctaactg ctttgatgc tgttttataa 1140
 agggatagaa ggatataaaa a 1161

<210> 3111
 <211> 611
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (543)..(543)
 <223> n is a, c, g, t or u

<400> 3111
 tttttatagg gtttccttaa atgtttttat ggtaaaaatc tgtacaaaca gatataattta 60
 tataagttac atattttaag aaaaatcagt catttttcat atataattgc aaagaattaa 120
 gatcatttaa ctttagcact ataagcaagc attaaattaa atgcactcag atttttggca 180

cattatatgg cattccttat accacatatt tataagatct aaaggattat aaacatatta 240
 cacataataa ttaagtccaa tataaattgt gttcagggtta taaaatgccc tatttaagtt 300
 gtgctcttgg tgaggggtgaa cagaaaaaaa aaggcttctt ctttagccct taagcctatg 360
 acacaatttc catgctggta attcctttca tcttctgaag aatctctatt ttattataac 420
 attattggct ttcagcttgg aatttctcta cgcagattgt ctattgacag tgccaaggaa 480
 acatctcact gtccacagaa tagcagcctc caccagttg aaagctgcac atgtttcca 540
 ctntaccatt ggtacttccc tctgatggca tccagcacac gaccattagc ctgagtgatg 600
 cccaactgag c 611

<210> 3112
 <211> 572
 <212> DNA
 <213> Homo sapiens

<400> 3112
 ttttggggac ttcttagctt gctctctcct gagtcccact ggccacccca gcacacagca 60
 gaggcctagc aagtctcaag tgaggcaatc ctggactagg gcaaacatgg cttgttccaa 120
 aagccggggg ttaaggaatc aaagtcaggt gaaactatca ctttcacaaa agcttttctt 180
 gactcctggg cctagtatct ttgccccg gcagaatgta acagcaaaat gtctccttct 240
 gaaacggaag gcacagccct ctttcagaag caaaacacct taacactcgg cttctatttg 300
 cttaagaatt tacaataga aatgagaatc aaaggtttta actcatctga tagcactggg 360
 caccacatgt tcacagcctg cttctttgaa ttgttagtgt ctccccaata aataaataca 420
 gaaccttgga tacccttcga attttaaaat acctaaagt cttccattaa tcttattttt 480
 taaaaatgct aggtttgttt cagttacctg cagcaatcaa aaagctttgg caccttcttt 540
 tagagaattg cacaaaaag gatgcatcaa gg 572

<210> 3113
 <211> 1026
 <212> DNA
 <213> Homo sapiens

<400> 3113
 cagcatgttg agccggggcag tgtgcggcac cagcaggcag ctgcctccgg ttttggggta 60
 tctgggtctc aggcagaagc acagcctccc cgacctgcc tacgactacg gcgccttgga 120
 acctcacatc aacgcgcaga tcatgcagct gcaccacagc aagcaccacg cggcctacgt 180
 gaacaacctg aacgtcaccg aggagaagta ccaggaggcg ttggccaagg gagatgttac 240
 agcccgata gctcttcagc ctgcactgaa gttcaatggt ggtggtcata tcaatcatag 300
 cattttcttg acaaacctca gccctaacgg tggtaggaga cccaaagggg agttgctgga 360

```

agccatcaaa ctggactttg gtcccttga caagtttaag gagaagctga cggctgcac 420
tgttggtgtc caaggctcag gttggggttg gcttgggttc aataaggaa cgggacactt 480
acaaattgct gcttgtccaa atcaggatcc actgcaagga acaacaggcc ttattccact 540
gtcggggatt gatgtgtggg agcacgctta ctaccttcag tataaaaatg tcaggcctga 600
ttatctaaaa gctatttggg atgtaataca ctgggagaat gtaactgaaa gatacatggc 660
ttgcaaaaag taaaccacga tcgttatgct gagtatgta agctctttat gactgttttt 720
gtagtggat agagtactgc agaatacagt aagctgctct attgtagcat ttcttgatgt 780
tgcttagtca ctatttcat aaacaactta atgttctgaa taatttctta ctaaacattt 840
tgttattggg caagtattg aaaaatagta atgctttgtg tgattgaatc tgattggaca 900
tttctctcag agagctaaa tacaattgtc atttataaaa ccatcaaaaa tattccatcc 960
atatacttgg gggacttgta gggatgcctt tctagtccta ttctattgca gttatagaaa 1020
atctag 1026

```

```

<210> 3114
<211> 1271
<212> DNA
<213> Homo sapiens

```

```

<400> 3114
ctgtatttgg gttcctggaa cacttttagg gcttgtgatt ctactgcttc ttattcacac 60
tataatacat gtctcaccaa tagatgattc aagaacatca tttaaatata caatttttca 120
ttctctattt ttgctaaatt tcttcatact caactttcag attctttaat ctccagctca 180
gcttcaacaa ttcaacgctg ttctttctga aaaagtacac atcgtgcctt ctctacttcg 240
ctcttggaac ataatttctc atggcagctt ttactaaact gagtattgag ccagcattta 300
ctccaggacc caacatagaa ctccagaaag actctgactg ctgttcttgc caagaaaaat 360
gggttgggta cgggtgcaac tgttacttca ttccagtga acagaaaact tggaaacgaaa 420
gtcggcatct ctgtgcttct cagaaatcca gcctgcttca gcttcaaaac acagatgaac 480
tggattttat gagctccagt caacaatttt actggattgg actctcttac agtgaggagc 540
acaccgcttg gttgtgggag aatggctctg cactctccca gtatctattt ccactatttg 600
aaacttttaa tacaagaac tgcatagcgt ataatacaaa tggaaatgct ttgatgaat 660
cctgtgaaga taaaaatcgt tatatctgta agcaacagct catttaaatg ttctctgggg 720
cagagaaggt ggagagtaaa gaccaacat tactaacaat gatacagttg catgttatat 780
tattactaat tgtctacttc tggagtctat aaaatgtttt taaacagtgt catatacaat 840
tgtcatgtat gtgaaacaat gtgtttttaa attgatgaaa ttcgttcacc tacatttgag 900

```

aattataaaa ttaacataaa gaatttttga ttttcattta atgtatataa tgttaaattc	960
aatgtagttt tattacaCat ttatgtaatt ttatttacat tcttgctaatt tctcagcaga	1020
aattttaata agattttaatt cacatcaaat aaaatttaga aaataaaatt taactcacac	1080
tgcccaggct ggagcatagt ggcaagatca tagctcattg caagctcaag tgatcctcct	1140
gactcagcct cccaagtagc taggactgca ggcaccatgt cactatgccc gactaatttt	1200
taatttttaa ttttttgta agacaaggtc ttgctatgtt gcccaggctg gtcttgaact	1260
cctggcctca a	1271

<210> 3115
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 3115 gggtttatcc caggatattc attgatagaa aattaaagga gtaatttata aaatcactac	60
atgaacaagt aaaacacac acagcaaaat ttacatcaaa attattacgt ggtacagaat	120
ccaaaagtca taaaaagcaa agctatctt ttttccactc tggcaccat ctgttcttcc	180
ctggagtc aaactattac caatttttag gtatacttcc aaagatactt actgcattta	240
caagcacaga cttatatgta ttctaaaaga ataagagaca ttttcagcat gttgctttgt	300
tcaacaccac agtatatctt aaagatggtc ccccatcaat acatatagag atctctct	358

<210> 3116
 <211> 4045
 <212> DNA
 <213> Homo sapiens

<400> 3116 gcagccagag ctcagcaggg ccctggagag atggccacgg tcccagcacc ggggaggact	60
ggagagcgcg cgctgccacc gcccattgtc tcagccaggg ctctcttctc cggtccacc	120
ctgtggatgt aatggcgcc cctgctctgt cctggcgtct gccctctctc atctctctcc	180
tgcccctggc tacctcttgg gcatctgcag cggatgaatg cacttcccag ttcacatgct	240
tctacaactc gagagccaac atctctctgt tctggagcca agatggggct ctgcaggaca	300
cttctctgca agtccatgcc tggccggaca gacggcggtg gaaccaaacc tgtgagctgc	360
tcccctgtag tcaagcatcc tgggctgca acctgatcct cggagcccca gattctcaga	420
aactgaccac agttgacatc gtcacctga ggggtgctgt ccgtgagggg gtgcgatgga	480
gggtgatggc catccaggac ttcaagccct ttgagaacct tcgctgatg gccccatct	540
ccctccaagt tgtccacgtg gagaccaca gatgcaaat aagctgggaa atctcccaag	600

cctcccacta ctttgaaga cacctggagt tgcaggcccg gacgctgtcc ccaggccaca	660
cctggggagga gggccccctg ctgactctca agcagaagca ggaatggatc tgcttggaga	720
cgctcaccac agacaccag tatgagtttc aggtgcgggt caagcctctg caaggcgagt	780
tcacgacctg gagccccctg agccagcccc tggccttcag gacaaagcct gcagcccttg	840
ggaaggacac cattccgtgg ctgcggccacc tcctcgtggg cctcagcggg gcttttggct	900
tcctcatctt agtgactctg ctgatcaact gcaggaaacac cggggccatgg ctgaagaagg	960
tcctgaagtg taacacccca gaccctcga agttcttttc ccagctgagc tcagagcatg	1020
gaggagagct ccagaagtg ctctcttcgc ccttccccctc atcgctcttc agccctggcg	1080
gcctggcacc tgagatctcg ccactagaag tgctggagag ggacaagggt acgcagctgc	1140
tcctgcagca ggacaagggt cctgagcccg catccttaag cagcaaccac tcgctgacca	1200
gctgcttcac caaccagggt tactttctct tccacctccc ggatgccttg gagatagagg	1260
cctgccaggt gtactttact tacgaccctc actcagagga agaccctgat gagggtgtgg	1320
ccggggcacc cacagggtct tcccccaac cctgcagcc tctgtcaggg gaggacgacg	1380
cctactgcac ctccccctcc agggatgacc tgctgctctt ctccccagct ctccctcggtg	1440
gccccagccc cccaagcact gccccgggg gcagtggggc cggtgaagag aggatgcccc	1500
cttctttgca agaaagagtc ccagagact gggaccccca gccccgggg cctccccacc	1560
caggagtccc agacctggtg gattttcagc cccccctga gctggtgctg cgagaggctg	1620
gggaggaggt cctgagctgc ggccccaggg agggagtcag ttccccctg tccaggctc	1680
ctgggcaggg ggagttcagg gcccttaatg ctgcctgcc cctgaacact gatgcctact	1740
tgctccctcca agaactccag ggtcaggacc caactcactt ggtgtagaca gatggccagg	1800
gtgggaggga ggcagctgcc tgctctgcgc cgagcctcag aaggaccctg ttgagggtcc	1860
tcagtccact gctgaggaca ctcagtgctc agttgcagct ggactttccc acccgatgg	1920
ccccacccca gtcctgcaca cttgggtccat ccatttccaa acctccactg ctgctcccg	1980
gtcctgctgc ccgagccagg aactgtgtgt gttgcagggg ggcagtaact ccccaactcc	2040
ctcgtaatc acaggatccc acgaatttag gctcagaagc atcgctcttc tccagcctg	2100
cagctattca ccaatatcag tcctcgcggc tctccagggc tcctgcctc gacctcttc	2160
ctgggttttc tgccccagcc tcctccttcc ctcctctccc cgtccacagg gcagcctgag	2220
cgtgctttcc aaaacccaaa tatggccacg ctccccctcg gttcaaaacc ttgcacagg	2280
cccactgccc tcagccccc ttctcagcct ggtacttgta cctccggtgt cgtgtgggga	2340
catecccttc tgcaatcttc cctaccgtcc tcctgagcca ctcagagctc cctcacacc	2400
cctctgttgc acatgctatt ccctggggct gctgtgcgct cccctcctc taggtgacaa	2460

acttccctga ctcttcaagt gccggttttg ettcctctgg aggggaagcac tgcctccctt 2520
 aatctgccag aaacttctag cgtcagtgct ggagggagaa gctgtcaggg acccagggcg 2580
 cctggagaaa gaggccctgt tactattcct ttgggatctc tgaggcctca gagtgccttg 2640
 ctgctgtatc tttaatgctg gggcccaagt aaggggcacag atccccccac aaagtggatg 2700
 cctgctgcat ctccacacag tggcttcaca gaccacaag agaagctgat ggggagtaaa 2760
 cctggagtc cgaggcccag gcagcagccc cgctagtgg tgggccctga tgcgtccagg 2820
 cctgggacct cccactgccc cctccactgg aggggtctcc tctgcagctc agggactggc 2880
 aactggcct ccagaagggc agctccacag ggcagggcct cattattttt cactgccccca 2940
 gacacagtgc ccaacacccc gtctataacc ctggatgaac gaattaatta cctggcacca 3000
 cctcgtctgg gctccctgcg cctgacattc acacagagag gcagagtccc gtgcccata 3060
 ggtctggcat gcccctcct gcaaggggct caacccctta ccccgacccc tccacgtatc 3120
 tttcctaggc agatcagctt gcaatggctc aaacaacatt ccacccacgc aggacagtga 3180
 cccagctccc agctaactct gacctgggag cctcaggca cctgcactta caggccttgc 3240
 tcacagtga ttgggcacct gaccacacgc cccacacggc tctgaccagc agcctatgag 3300
 ggggtttggc accaagctct gtccaatcag gtaggctggg cctgaactag ccaatcagat 3360
 caactctgtc ttgggcgctt gaactcaggg agggaggccc ttgggagcag gtgcttcttg 3420
 acaaggctcc acaagcgttg agccttgaa aggtagacaa gcgttgagcc actaagcaga 3480
 ggaccttggg ttcccaatac aaaaatacct actgctgaga gggctgtga ccatttggtc 3540
 aggattcctg ttgcctttat atccaaaata aactcccctt tcttgaggtt gtctgagtct 3600
 tgggtctatg ccttgaaaaa agctgaatta ttggacagtc tcacctcctg ccatagggtc 3660
 ctgaatgttt cagaccacaa ggggctccac acctttgctg tgtgttctgg ggcaacctac 3720
 taatcctctc tgcaagtcgg tctccttacc cccccaatg gaaattgtat ttgccttctc 3780
 cactttggga ggctcccaact tcttgggagg gttacatttt ttaagtctta atcatttctg 3840
 acatatgtat ctatacatcc gtatctttta atgatccgtg tgtaccatct ttgtgattat 3900
 ttccttaata ttttttcttt aagtcagttc attttcgttg aaatacattt atttaaagaa 3960
 aaatccttgt tactctgtaa atgaaaaaac ccattttcgc tataaataaa aggtaactgt 4020
 acaaaataag tacaatgcaa caaaa 4045

<210> 3117

<211> 573

<212> DNA

<213> Homo sapiens

```

<220>
<221> misc_feature
<222> (521)..(521)
<223> n is a, c, g, t or u

<400> 3117
gattgtataa ataatttatt tctgttcaca gcatcatata tgcattataa aaggctatgg      60
aaacaaaaga gaaggatgat gagacagaga attacagcag tagaaaggaa aacagaaacc      120
agggcacaca gttccaacac cagaacagag aatttgggaa gataattgct ctgaaacaga      180
actggcctcc ctgtgtctat tagaaaaacat ttccaaagct cacggaggga ggccaacttc      240
ccctatggga aacattca ctcgccaaag ggcagaaggc atcataaatc acccattgat      300
acattggtgg ggggctcctg tccccctggg gaccactcca aggtgatttg atctgtgctt      360
cctctgttgg gtcagagacg aaacgggcta ttattaggtc aaacattaca gaaatcaact      420
gagactctta actagtagtt gatacaccac agggctttac tttactgcac aattactaac      480
agttgattgc acccttaagt attgattatg caaaaaacaa natcatctcg catcagtttt      540
aaagcatgac aggggttgaa cagtgatctt gaa      573

```